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ROYAL GARDENS, KEW.

William Marshall

H A N D - L I S T

(906)

OF

FERNS AND FERN ALLIES

CULTIVATED IN

THE ROYAL GARDENS.



L O N D O N :

SOLD AT THE ROYAL GARDENS, KEW.

PRINTED FOR HER MAJESTY'S STATIONERY OFFICE,
BY EYRE AND SPOTTISWOODE,
PRINTERS TO THE QUEEN'S MOST EXCELLENT MAJESTY.

1895.

Price Sixpence.

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ROYAL / GARDENS, / KEW.

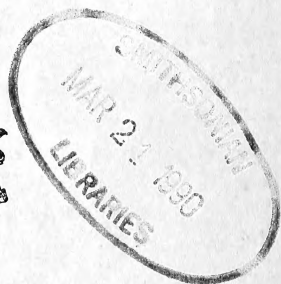
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P R E F A C E.

THE general purpose of the series of Hand-lists of the plants cultivated in the Royal Gardens which is in course of publication, and of which the present one is a part, is sufficiently indicated in the preface to that which enumerates the Trees and Shrubs.

The collection of Ferns, whether tropical or temperate, is perhaps, next to that of Palms, the most important feature of the cultivation under glass in the Royal Gardens.

A special interest attaches to it, because it has been used so much in the preparation of most of the books and papers dealing with ferns which have been published in this country during the last half century. The celebrated botanical artist, Francis Bauer, was resident draughtsman for 50 years (1790-1840) to the Royal Botanic Garden at Kew, and the beautiful series of analytical drawings of ferns which he made were published by Sir William Hooker, after his death in 1842, with descriptive letter-press and additions, under the title of *Genera Filicum*. During the 25 years (1840-1865) for which Sir William Hooker was the director of the gardens his attention was specially concentrated on ferns. Under the title of *Species Filicum* he published an elaborate work in five volumes, in which all the known species of typical ferns are fully described, and their synonymy and geographical distribution worked out, with copious illustrations by Mr. Walter Fitch.

Of this, the first volume appeared in 1846, and the last in 1864. He planned also a condensed hand-book of all the known ferns, to be called *Synopsis Filicum*, intended specially for the use of colonists and travellers. All the drawings for this had been made, but the letter-press was not far advanced when he died in the autumn of 1865. It was completed by Mr. J. G. Baker, F.R.S., now Keeper of the Herbarium, in 1868, and a second edition was brought out in 1874. Since that date many hundred new species have been discovered, and a volume of Hooker's *Icones Plantarum*, containing plates and descriptions of the more interesting of the novelties, was published in 1887. Mr. Baker has also published in the *Annals of Botany* (1891) a summary of new ferns discovered or described since 1874. The type specimens from which most of the descriptions and plates contained in this series of books have been made are deposited in the Kew Herbarium.

The living collection in the garden owes its completeness very largely to the zeal and assiduity with which the veteran pteridologist, Mr. John Smith, curator of the Royal Gardens from 1841-63, watched over it for more than 40 years.

In his privately printed *Records of Kew* (pp. 322, 323) he gives the following particulars of its origin and development:—"In the year 1822 I found the collection of ferns at Kew extremely poor, especially as regards tropical species, very many of those introduced in previous years having been lost and very few new ones added. . . . The tender exotic species were more or less of them growing without any arrangement in different houses, and unnamed, their number

amounting to about 40. In 1825 I arranged the tropical species in a group at the end of the then lean-to house . . . now included in the tropical fern house, the area they occupied being 6 ft. by 12 ft. These formed the nucleus of the now great collection. They were successively added to by importations of living plants, as also plants raised from spores obtained from herbarium specimens."

"The collection continued yearly to increase, and in 1846 [1845] I drew up a list of the collection, which was published in an Appendix to the *Botanical Magazine*, for that year; the number then amounted to 400 [378] species. This in 1857 [1856] was followed by another list, entitled 'Catalogue of Cultivated Ferns,' in which 600 [504] species are enumerated."

The principal books published by Mr. Smith are his *Ferns, British and Foreign*, issued in 1866, which contains a classified list of all the species then known in cultivation, full directions for the cultivation of ferns of the different climatic types and by far the most complete history of their gradual introduction which has ever appeared in print, and his *Historia Filicum*, issued in 1875, which contains woodcuts of 220 types and gives a full exposition of his views on fern classification.

In 1868 the last published list was prepared by Mr. J. G. Baker. It enumerates 802 species and varieties of ferns and 48 of fern allies.

The present list comprises 1,116 species and varieties of ferns and 97 of fern allies; this is exclusive of British ferns of which 586 varieties are in cultivation.

The collection falls into three great groups:—(i.) Tropical; (ii.) Temperate; and (iii.) Hardy Ferns.

The TROPICAL FERNS are cultivated in No. II. House.

The TEMPERATE FERNS are cultivated in No. III.; the Filmy Ferns have a separate House (No. II A.) constructed for the special treatment which they require. The fine collection of Temperate Tree ferns is contained in the Temperate House.

The HARDY FERNS are arranged on and about a small rockery, $\frac{7}{E}$ of the Key Plan, and forming the south boundary of Lawn L.

The structural development of the buildings in which the collection is housed has kept pace with its growth. Their history may be given briefly.

The Tropical Fern House (No. II.) is a span-roofed house 129 feet long, 34 feet broad, and 15 feet high in the centre. It has a wide transept on the south side, 40 feet long, 33 feet wide, and 19 feet high.

In 1841 the site of this house was occupied by two lean-to houses used for miscellaneous collections of stove plants. They are enumerated in Dr. Lindley's Report to the Treasury (1838) as Nos. 2 and 3; the former stood to the west and was 50 feet long; the length of the other was 60 feet. It was in No. 2 that, as stated above, John Smith first arranged the nucleus of the collection of Tropical Ferns.

In 1843, No. 2 was doubled and made into a span house.

In 1845, No. 3 was entirely taken down and a new span-roofed house erected in its place. It joined on to

No. 2, which was kept at a somewhat lower temperature, but opened into it through a partition. The centre was filled up with slate shelf staging, and the sides with stone shelves. No. 2 was used as a stove for rare Palms and large Tropical Ferns. No. 3 was at first occupied by the Woburn collection of orchids presented by Her Majesty the Queen; for this purpose it proved eventually unsuited. The orchids were gradually replaced by *Aroidae* and Ferns. Ultimately the latter obtained possession of the whole house. According to John Smith (Records, p. 334), "the centre of the house was a raised sloping rockery, amongst which the plants were growing in a natural state, forming fine bushy specimens."

A small house for tree ferns was built in 1861; this was connected with the principal house in 1868, and now forms the transept.

In 1879 the Tropical Fern House, which from the decay of the timbers had lapsed into an almost ruinous condition, was further severely damaged by the hail storm of August 3rd; 1,152 panes of glass in it were broken. It was subsequently put into a thorough state of repair, but the collections received considerable damage.

In 1887 the west end of the house was set back a few feet; the staging was partly re-arranged and the broad path through the transept was made.

The humid conditions necessary for the cultivation of tropical ferns are unfortunately not conducive to the preservation of the structures in which they are grown when they are built of wood. In 1889 it therefore again

became necessary to renew the east wing of No. II. house. In order to secure greater durability it was decided to use iron for the principal framework, and wood only for the lights. The top-ventilation was provided for by means of a lantern instead of by the older and more clumsy method of sliding sashes. At the same time the use of green glass in the re-constructed wing was abandoned. This was introduced at Kew in 1846 on the recommendation of the late Mr Robert Hunt, F.R.S., who advocated its use on theoretical grounds which are now known to be mistaken. The resulting improvement in the growth of the plants, especially the species of *Adiantum* was very marked, and in 1892 a portion of the west wing was re-glazed with equally satisfactory results.

The TEMPERATE FERNS are now collected in a house (No. III.), which was also built on the system of mixed iron and wood construction. It was erected in 1892 to take the place of a decayed and obsolete structure composed of two small greenhouses united together, Nos. 4 and 5 of Dr. Lindley's Report. The former (the northern wing) was erected in 1803, and in 1840 contained New Holland and Cape plants; the latter, which was "remodelled" in 1825, was filled with succulents.

The reconstructed No. III. is a span-roofed house 60 feet long, 23 feet wide, and 13 feet high. It contains a broad central and two side stages, with paths on both sides.

The north wing of the former No. III. had been latterly devoted almost exclusively to Filmy Ferns after the Kew collection had been enriched by the gift of that formed

by the late John Cooper Forster, which was presented to the Royal Gardens in 1888 by his widow.

The collection is now contained in the new Filmy Fern House (No. II. A.) erected on the north side of No. II. It is 50 feet long by 14 feet wide, with a central path and two cases running the full length of the house.

The HARDY FERNS occupy the rockery originally devoted to Alpine plants (before the construction of the Rock Garden in 1882), and it extends over part of the adjacent ground. A collection was established here in 1874, and the rockery itself was reconstructed in 1888.

The collection as a whole is now probably the richest in existence in garden forms of British species. This is due to the munificent bequest by W. C. Carbonell, Esq., of the extensive collection formed by him at Rhiew Castel, Usk, Monmouthshire. The whole was removed to Kew in 1887. It consisted of 4,261 specimens, many probably unique, besides some hundreds of seedlings.

The total number of well-marked species of ferns and the vascular Cryptogamia (Fern Allies) now mounts up to 3,500. Not more than one-third of these have been brought into cultivation, and Kew is always glad to receive any additions, if possible in the form of well-established plants; if not, in the shape of dry spores, which can be collected and sent very easily by post in small packets.

The following table, which shows the per-centage of the total number of ferns found in different parts of the

world was drawn up by Mr. Baker in 1867; but he does not think that the discoveries of the last 20 years will have altered any of the figures materially :—

Arctic Zone	-	-	-	1 per cent.
Europe	-	-	-	4 „
Temperate Asia, including				
Himalayas	-	-	-	18 „
Temperate N. America			-	5 „
Temperate S. Africa	-	-	-	7 „
Australia and N. Zealand			-	9 „
South temperate America			-	5 „
Tropical Africa	-	-	-	15 „
Tropical Asia	-	-	-	39 „
Tropical America	-	-	-	42 „

The present hand-list is divided into three parts :—

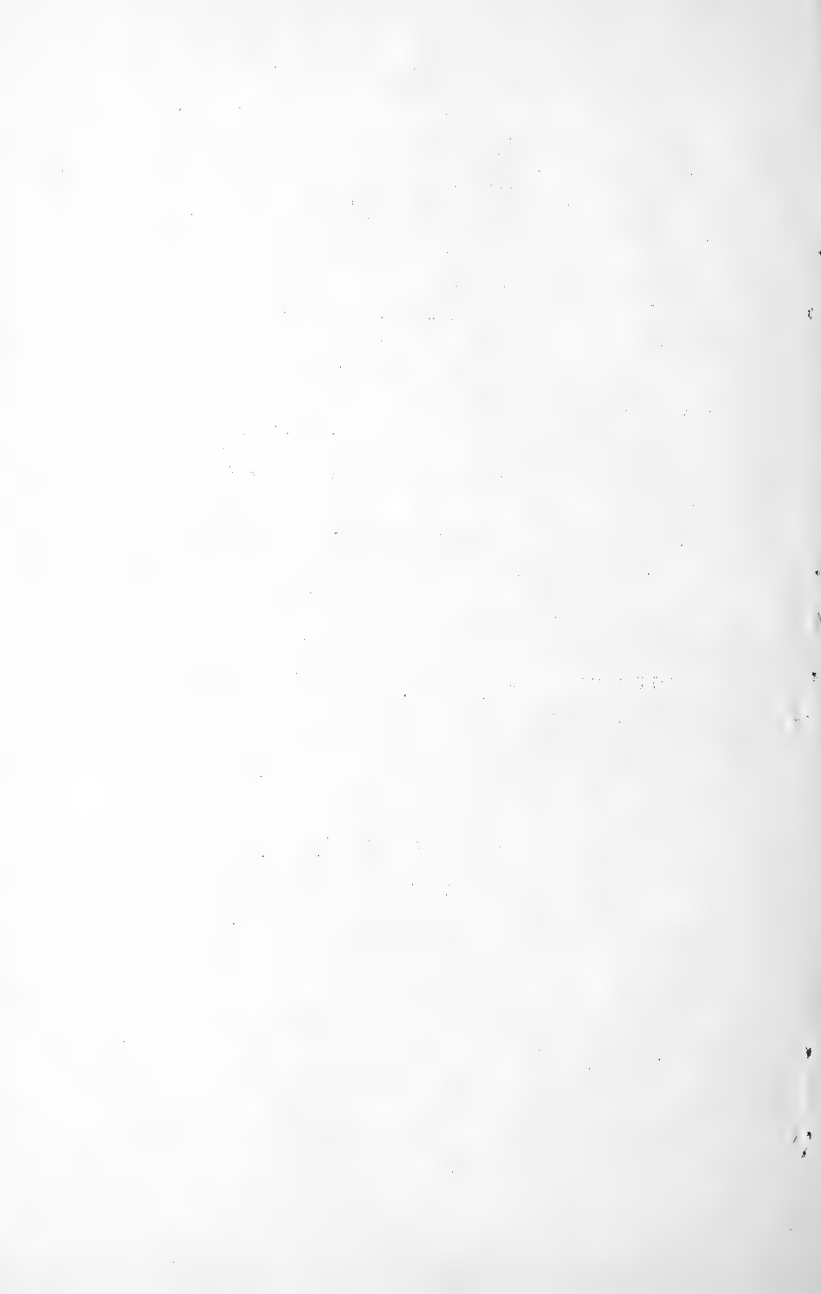
- (i) FERNS proper (pp. 13-133);
- (ii) FERN ALLIES (pp. 135-143); and
- (iii) as an APPENDIX, a list of garden forms of British species (pp. 145-183).

With regard to (i) Ferns proper, the arrangement is alphabetical and synonyms have been only sparingly introduced, those included being chiefly such as are in use in gardens and which are here referred to the correct name in each case. It has not been thought necessary, therefore, to supply an index. Those who wish to pursue the study of fern-nomenclature further may fall back on Hooker and Baker's *Synopsis Filicum*, upon which the present hand-list is substantially based.

The Fern allies (ii) have also been grouped alphabetically. It has not been thought necessary for the

present purpose to separate them according to a botanical classification.

The cultivated and feral varieties of British Ferns (iii) have been enumerated in an Appendix. Although the collection of them at Kew is very rich they stand in a different position to the collection of recognised and well-determined species. Apart from their intrinsic beauty, which is often striking, they are of considerable scientific interest as showing the range of variation due to crossing and seminal reproduction. The amateurs and cultivators who have raised them have furnished them with Latin names, often cumbrous and fantastic, which have received no formal definition. They cannot, therefore, be fixed or quoted for any scientific purpose ; they have, in fact, the same relationship to the species from which they have originated as Bedding Pelargoniums bear to *Pelargonium zonale* or as the Drumhead and other cabbages to *Brassica oleracea*.



I. FERNS.

Acrophorus. *See* Davallia.

Acrostichum, *L.*

A. acuminatum, *Hook.* Brazil.

A. alienum, *Sw.* Tropical America.

A. apodum, *Kaulf.* Tropical America.

A. appendiculatum, *Willd.* Tropical Asia.

A. aureum, *L.* Tropical and sub-tropical regions.

A. Burchellii, *Baker.* Brazil.

A. Cænopteris, *Kze.* Tropical America.

A. cervinum, *Sw.* Tropical America.

A. conforme, *Sw.* Tropical and sub-tropical regions.

Var. *alatum* (*Fée*). Tropical and sub-tropical regions.

A. crassinerve, *Kze.* *See* *latifolium*.

A. crinitum, *L.* Tropical America.

A. crispatulum, *Wall.* *See* *virens*.

A. decoratum, *Kze.* West Indies, Guiana, &c.

A. drynarioides, *Hook.* Penang, Solomon Isles.

A. flagelliferum, *Wall.* Tropical Asia.

A. gramineum, *Baker.* West Indies.

A. Herminieri, *Bory.* West Indies.

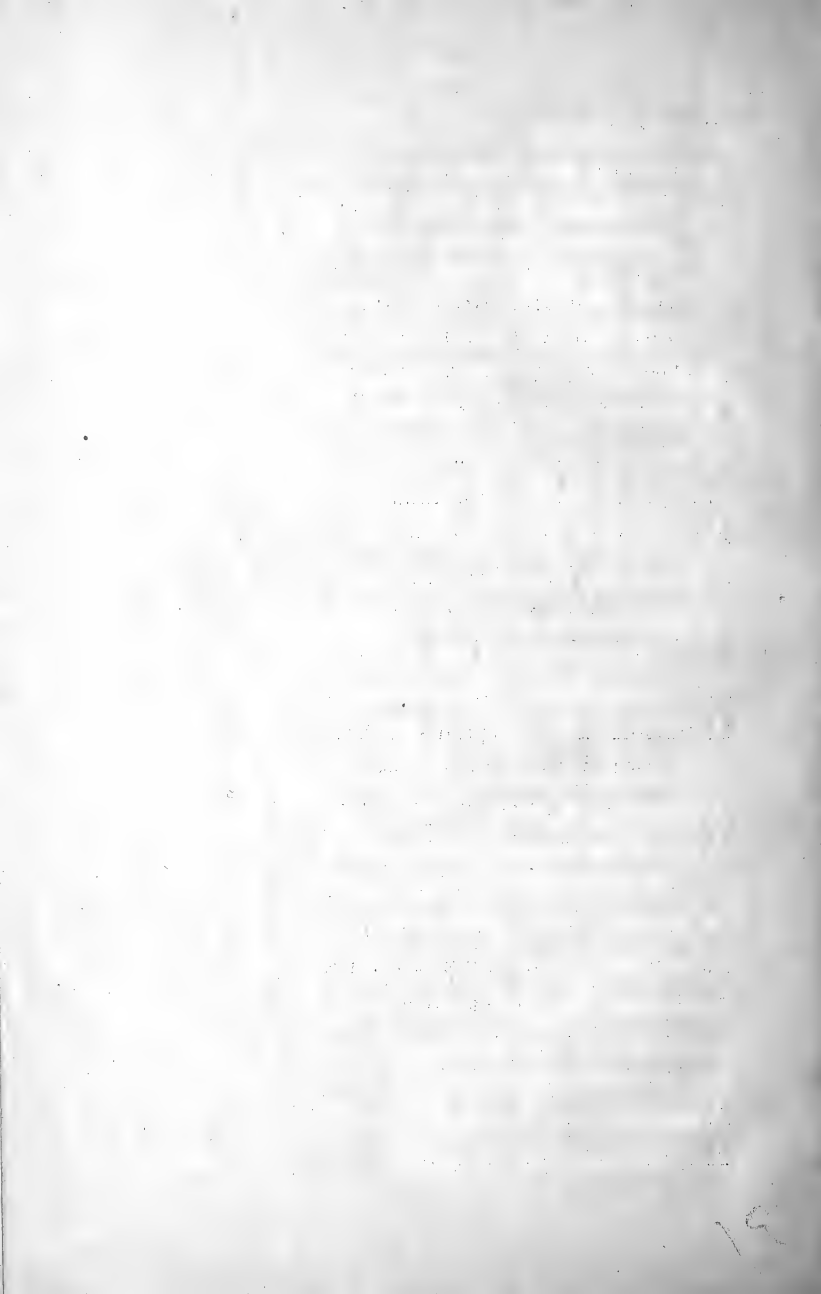
A. heteromorphum, *Kl.* Colombia, Ecuador.

A. hybridum, *Bory.* Tropical Africa, Tropical America.



Acrostichum, *L.*—*cont.*

- A. latifolium*, *Sw.* Tropics.
 Var. *angustifolium*, *Hort.* Tropical America.
 Var. *callæfolium* (*Bl.*). Tropical Asia.
 Var. *conopodium*, *Hort.*
 Var. *crassinerve* (*Kze.*). Brazil.
 Var. *Sartorii* (*Liebm.*). Mexico.
- A. Lingua*, *Raddi.* Tropical America.
A. longifolium, *Jacq.* See *latifolium*.
- A. luridum*, *Fée.* Trinidad, Guiana.
- A. magnum*, *Baker.* Demerara.
- A. melanopus*, *Kze.* Venezuela.
- A. muscosum*, *Sw.* Tropical America.
- A. osmundaceum*, *Hook.* Tropical America.
 Var. *frondosum*, *Hort.*
- A. pallidum*, *Baker.* West Indies.
- A. peltatum*, *Sw.* Tropical America.
- A. Prestoni*, *Baker.* Rio Janeiro.
- A. quercifolium*, *Retz.* Tropical Asia.
- A. repandum*, *Bl.* Tropical Asia.
 Var. *quoyanum* (*Gaud.*). Tropical Asia.
- A. Sartorii*, *Liebm.* See *latifolium*.
- A. scandens*, *J. Sm.* Tropical America.
- A. simplex*, *Sw.* Cuba to Brazil.
- A. sorbifolium*, *L.* Tropics.
 Var. *buxifolium* (*Kze.*).
- A. spicatum*, *L.* Tropics of Old World.
- A. squamosum*, *Sw.* Tropics.



Acrostichum, *L.*—*cont.*

- A. Taylora*, *Bailey*. Queensland.
- A. tenuifolium*, *Baker*. Mascarene Islands.
- A. tomentosum*, *Bory*. Bourbon.
- A. undulatum*, *Willd.* See *villosum*.
- A. variabile*, *Hook.* Tropical Asia.
- A. villosum*, *Sw.* Tropical America.
Var. *undulatum* (*Willd.*).
- A. virens*, *Wall.* Tropical Asia.
Var. *crispatulum* (*Wall.*).
- A. viscosum*, *Sw.* Tropics.

Actiniopteris, *Link.*

- A. radiata*, *Link.* Tropical Asia, Tropical Africa.
Var. *australis*, (*Link.*).

Adiantopsis. See *Cheilanthes*.*Adiantum*, *L.*

- A. æthiopicum*, *L.* Tropical and south temp. zones.
Var. *assimile* (*Sw.*). Australia.
Var. *chilense* (*Kaulf.*). Chili.
Var. *pellucidum*, (*M. & G.*). Mexico.
Var. *scabrum* (*Kze.*).
- A. affine*, *Hook.* See *diaphanum*.
- A. amabile*, *Moore.* See *Moorei*.
- A. aneitense*, *Carruth.* Aneiteum.
- A. assimile*, *Sw.* See *æthiopicum*.
- A. Bausei*, *Moore.* Garden origin.
- A. bellum*, *Moore.* Bermuda.
- A. Birkenheadii*, *Hort.* Garden origin.

Adiantum, *L.*—*cont.*

- A.* **Capillus-veneris*, *L.* Tropical and temp. zones.
 Var. Lowei, *Hort.* Crimea.
 Var. moritzianum (*Klotzsch*). South America.
- A. cardioclaena*, *Kze.* *See polyphyllum.*
- A. Catherineæ*, *J. Sm.* *See trapeziforme.*
- A. caudatum*, *L.* Tropics everywhere.
 Var. ciliatum, *Hort.*
- A. Collisii*, *Moore.* Garden origin.
- A. colpodes*, *Moore.* Tropical America.
 Var. elegans, *Hort.*
- A. concinnum*, *H.B.K.* Tropical America.
 Var. Flemingii, *Hort.*
 Var. latum, *Moore.*
- A. cristatum*, *L.* Tropical America.
- A. cultratum*, *J. Sm.* *See trapeziforme.*
- A. cuneatum*, *L. & F.* Tropical America.
 Var. æmulum (*Moore*).
 Var. deflexum, *Hort.*
 Var. dissectum, *Hort.*
 Var. elegans, *Hort.*
 Var. elegantissimum, *Hort.*
 Var. fragrantissimum, *Hort.*
 Var. gracillimum (*Moore*).
 Var. grandis, *Hort.*
 Var. grandiceps, *Hort.*
 Var. lambertianum, *Hort.*
 Var. Lawsoni, *Hort.*

* For garden varieties, *see* p. 145.

Adiantum, *L.*—*cont.*

A. cuneatum, *L. & F.* Tropical America—*cont.*

Var. *Legrandi*, *Hort.*

Var. *mundulum* (*Moore*).

Var. *Pacotti*, *Hort.*

Var. *Rœnbeckii*, *Hort.*

Var. *reginae*, *Hort.*

Var. *schizophyllum*, *Hort.*

Var. *strictum*, *Hort.*

A. curvatum, *Kaulf.* Tropical America.

Var. *brasiliense* (*Raddi*).

A. cyclosorum, *Moore.* Andes.

A. decorum, *Moore.* See *Wagneri*.

A. deflexum. See *cuneatum*.

A. diaphanum, *Bl.* New Zealand, &c.

A. digitatum, *Presl.* Brazil, Peru, &c.

Var. *palmatum* (*Moore*).

Var. *speciosum*, (*Hook.*).

A. dolabrifforme, *Hook.* See *lunulatum*.

A. dolosum, *Kze.* Tropical America.

A. Edgeworthii, *Hook.* India and China.

A. elegans, *Hort.* Garden Origin.

A. emarginatum, *Bory.* See *æthiopicum*.

A. excisum, *Kze.* Chili.

Var. *Leyi*, *Hort.*

Var. *multifidum*, *Hort.*

A. Fergusoni, *Moore.* Ceylon.

A. formosum, *R. Br.* Australia.

A. fovearum, *Raddi.* See *tetraphyllum*.

Adiantum, *L.*—*cont.*

- A. fulvum*, *Raoul*. New Zealand.
- A. Funckii*, *Hort.* See *trapeziforme*.
- A. glaucophyllum*, *Hook.* Mexico.
- A. grandiceps*, *Hort.* See *cuneatum*.
- A. Hendersoni*, *Linden.* See *tetraphyllum*.
- A. henslovianum*, *Hook. f.* Colombia, Peru, &c.
- A. hippocrepis*, *Hort.*
- A. hispidulum*, *Sw.* Tropics, &c. of Old World.
Var. *tenellum*, *Moore.* Australia.
- A. Hosei*, *Baker.* Borneo.
- A. intermedium*, *Sw.* Tropical America.
- A. Kaulfussii*, *Kze.* Tropical America.
- A. Lathomii*, *Hort.* See *tenerum*.
- A. Legrandi*, *Hort.* See *cuneatum*.
- A. luddemannianum*, *Hort.* Garden origin.
- A. lunulatum*, *Burm.* Tropics everywhere.
Var. *dolabriforme* (*Hook.*).
- A. macrophyllum*, *Sw.* Tropical America.
Var. *bipinnatum*, *Jenm.* Jamaica.
Var. *albostriatum*, *Hort.*
- A. magnificum*, *Hort.* See *Wagneri*.
- A. matthewsianum*, *Hook.* See *polyphyllum*.
- A. monochlamys*, *Eaton.* Japan.
- A. Moorei*, *Baker.* Andes of Peru.
- A. moritzianum*, *Klotzsch.* See *Capillus-veneris*.
- A. neo-caledoniæ*, *Keys.* New Caledonia.
- A. neoguineense*, *Moore.* New Guinea.

Adiantum, *L.*—*cont.*

A. obliquum, *Willd.* Tropical America.

Var. *minus*, *Hort.*

A. Pacotti, *Hort.* See *cuneatum*.

A. pellucidum. See *æthiopicum*.

A. pedatum, *L.* North America, &c.

A. peruvianum, *Klotzsch.* Peru.

A. polyphyllum, *Willd.* Tropical America.

A. prionophyllum, *H.B.K.* See *tetraphyllum*.

A. pulverulentum, *L.* Tropical America.

A. reginæ, *Hort.* See *Capillus-veneris*.

A. reniforme, *L.* Madeira and Teneriffe.

Var. *asarifolium* (*Willd.*). Mauritius.

A. rhodophyllum, *Moore.* Garden origin.

A. rhomboideum, *Hort.* See *obtusum*.

A. Roebelini, *Hort.*

A. rubellum, *Moore.* Bolivia.

A. scabrum, *Kze.* See *æthiopicum*.

A. scutum, *Hort.* See *tenerum*.

A. Seemanni, *Hook.* Guatemala.

A. sessilifolium, *Hook.* See *henslovianum*.

A. setulosum, *J. Sm.* See *diaphanum*.

A. speciosum, *Hook.* See *digitatum*.

A. tenerum, *Sw.* Tropical America.

Var. *alcicorne*, *Hort.*

Var. *Farleyense*, *Moore.*

Var. *Lathomii*, *Hort.*

Var. *scutum*, *Hort.*

Var. *Victoriæ* (*Moore*).



Adiantum, *L.*—*cont.*

A. tetragonum, *Schrad.* Brazil.

A. tetraphyllum, *Willd.* Tropical America.

Var. *acuminatum*, *Hort.*

Var. *gracile*, *Hort.*

A. tinctum, *Moore.* Tropical America.

A. trapeziforme, *L.* Tropical America.

Var. *Catherinæ*, *J. Sm.*

Var. *cultratum*, *J. Sm.*

Var. *Funckii*, *Hort.*

A. triangulatum, *Kaulf.* See *intermedium*.

A. veitchianum, *Moore.* Andes of Peru.

A. Veitchii, *Hance.* See *monochlamys*.

A. velutinum, *Moore.* Tropical America.

A. venustum, *Don.* Himalaya.

Var. *integrifolium*, *Baker.* Himalaya.

A. Victoriæ, *Moore.* See *tenerum*.

A. villosum, *L.* Tropical America.

A. Wagneri, *Mett.* Andes of Peru.

Var. *magnificum* (*Hort.*).

A. Weigandii, *Moore.* Garden origin.

A. Williamsii, *Moore.* Andes.

A. Wilsoni, *Hook.* See *dolosum*.

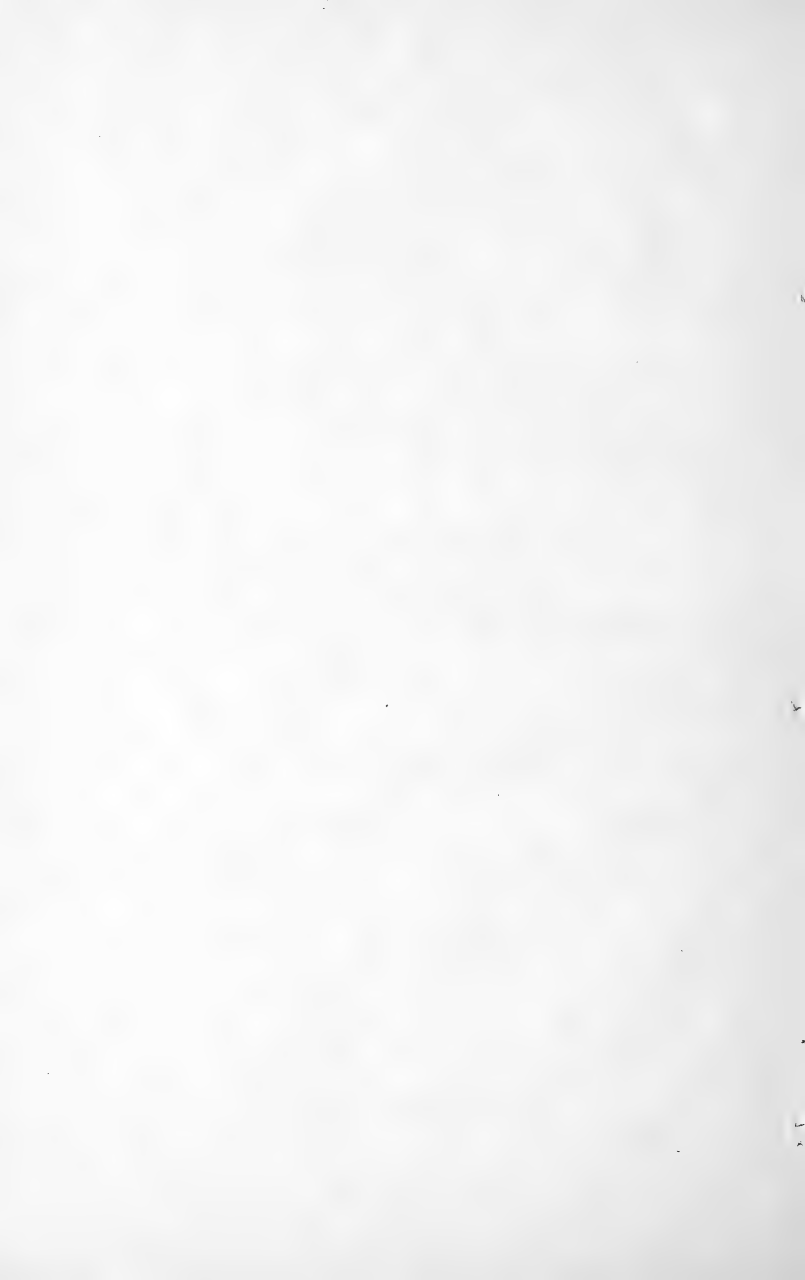
Aglaomorpha. See *Polypodium*.

Aleuritopteris. See *Cheilanthes*.

Allosorus. See *Pellæa* and *Cryptogramme*.

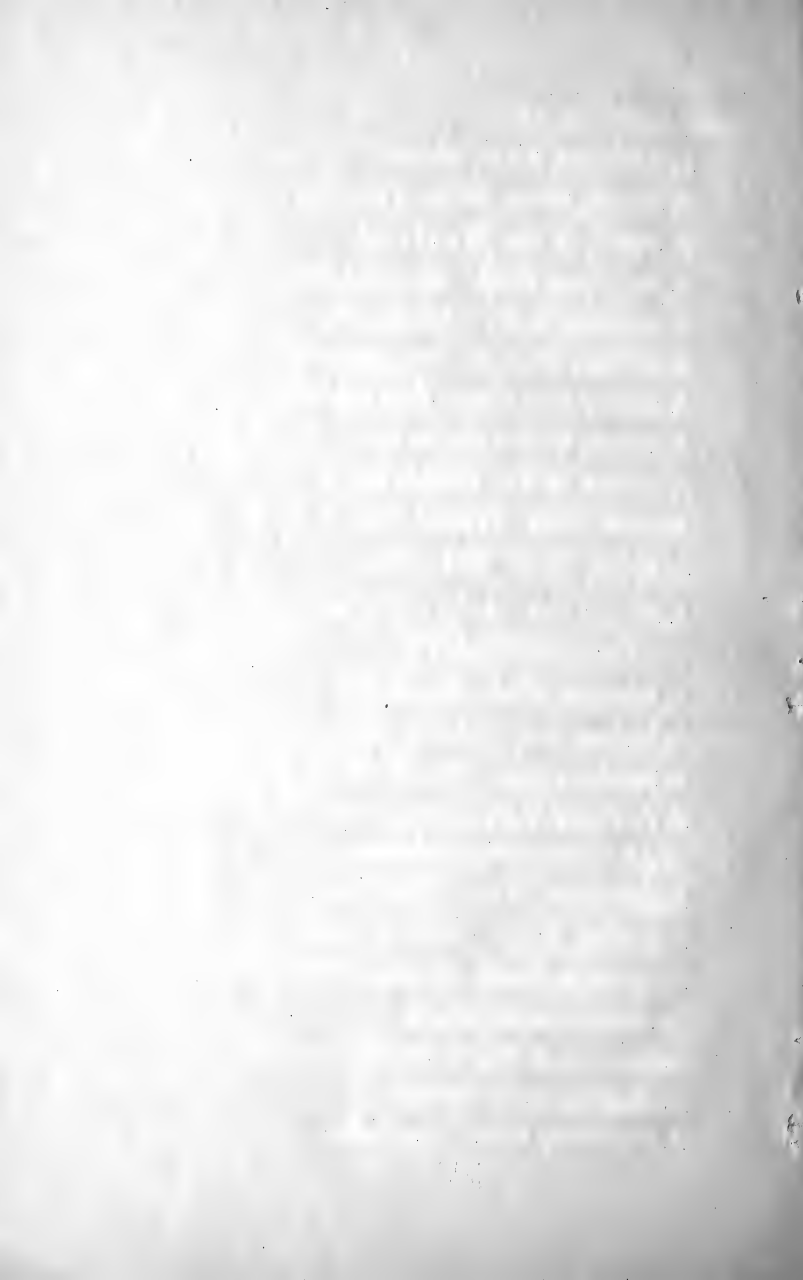
Alsophila, *R. Br.*

A. aculeata, *J. Sm.* See *ferox*.



Alsophila, *R. Br.*—*cont.*

- A. Andersoni*, *Scott.* Sikkim.
- A. armata*, *Presl.* Tropical America.
- A. aspera*, *R. Br.* West Indies.
- A. atrovirens*, *Presl.* Tropical America.
- A. australis*, *R. Br.* Australia, &c.
- A. Colensoi*, *Hook.fil.* New Zealand.
- A. contaminens*, *Wall.* Java and Malaya.
- A. crinita*, *Hook.* Ceylon, &c.
- A. excelsa*, *R. Br.* Norfolk Island.
- A. ferox*, *Presl.* Tropical America.
- A. glabra*, *Hook.* East Indies.
- A. infesta*, *Kze.* Andes and Brazil.
 Var. phalerata, *Mart.*
- A. latebrosa*, *Hook.* East Indies.
- A. leichardtiana*, *F. Muell.* Australia.
- A. Malzinei*, *Hort.* Mexico.
- A. paleolata*, *Mart.* Colombia and Brazil.
- A. phalerata*, *Mart.* *See infesta.*
- A. podophylla*, *Hook.* Hong Kong.
- A. procera*, *Kaulf.* Tropical America.
- A. pruinata*, *Kaulf.* Tropical America.
- A. radens*, *Kaulf.* Brazil.
- A. Rebeccæ*, *F. Muell.* Rockingham Bay.
- A. Taenitis*, *Hook.* Brazil.
- A. tomentosa*, *Hook.* East Indies.



Alsophila, *R. Br.*—*cont.*

A. truncata, *Brack.* Fiji, &c.

A. Van Geertii, *Hort.* See *Cyathea mexicana*.

Amphicosmia. See *Hemitelia*.

Anapeltis. See *Polypodium*.

Anchistea. See *Woodwardia*.

Anemia, *Swartz.*

A. collina, *Raddi.* Brazil.

A. dregeana, *Kze.* Natal.

A. fraxinifolia, *Raddi.* See *Phyllitidis*.

A. mandioccana, *Raddi.* Brazil.

A. Phyllitidis, *Sw.* Tropical America.

Var. *foetida*, *Hort.*

A. tomentosa, *Sw.* Tropical America.

Var. *fulva*, (*Sw.*).

Anemidictyon. See *Anemia*.

Anetium. See *Hemionitis*.

Angiopteris, *Hoffm.*

A. evecta, *Hoffm.* Tropics of Old World.

Var. *brongniartiana* (*De Vriese*). Tahiti.

Var. *hypoleuca* (*De Vriese*). Java.

Var. *macrophylla* (*De Vriese*). Java.

Var. *miqueliana* (*De Vriese*). Java.

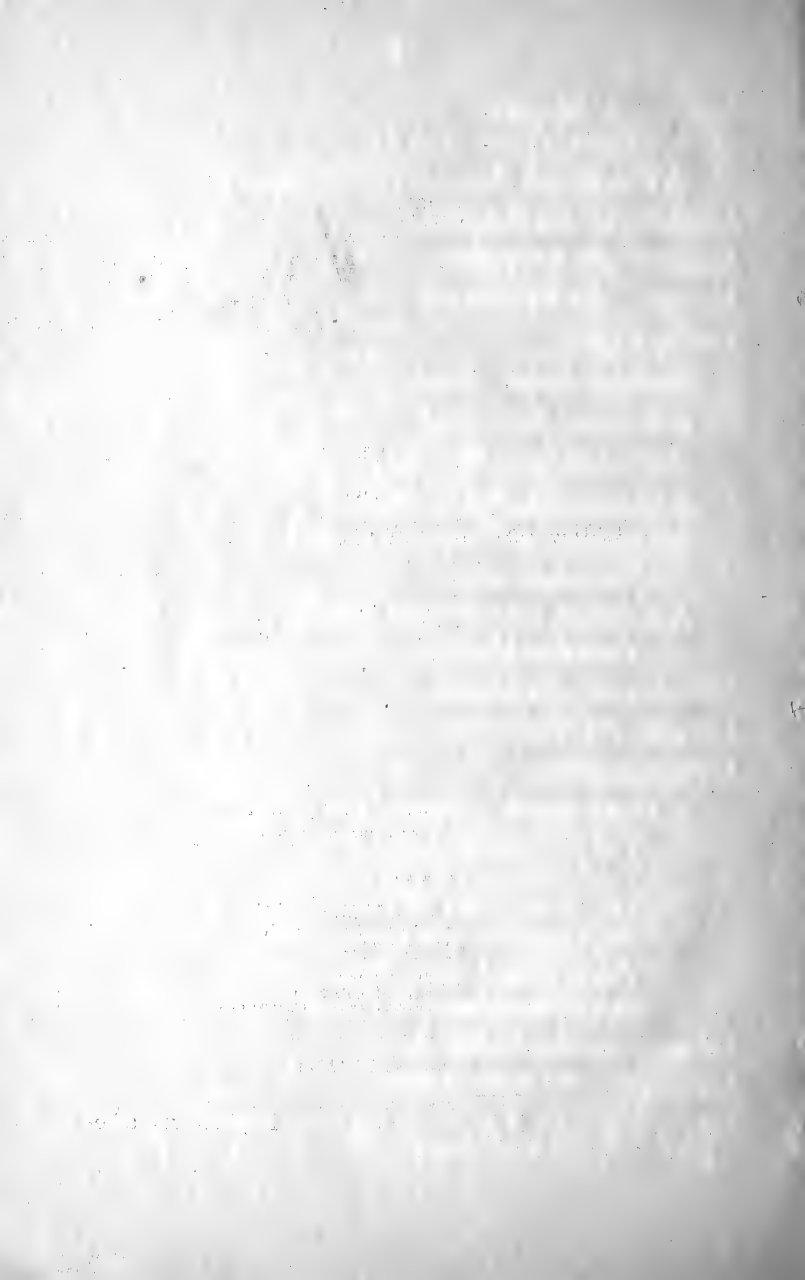
Var. *pruinosa* (*Kze.*). Java.

Var. *teysmanniana* (*De Vriese*). Java.

Anisogonium. See *Asplenium*.

Antigramme. See *Scolopendrium*.

Arthropteris. See *Polypodium tenellum*, *Nephrodium albo-punctatum*, and *Nephrolepis*.



Aspidium, Swartz.

A. acrostichoides, *Sw.* North America.

Var. *incisum* (*Hort.*).

*A. *aculeatum*, *Sw.* Ubiquitous.

Var. *angulare* (*Willd.*).

Var. *lobatum* (*Sw.*).

Var. *moritzianum*, (*Kze.*). South America.

Var. *setosum*, (*Wall.*). Himalaya.

Var. *tsus-simense* (*Hook.*).

A. amabile, *Bl.* Japan, &c.

A. angulare, *Willd.* See *aculeatum*.

A. anomalum, *H. & A.* Ceylon.

A. aristatum, *Sw.* Tropical Asia.

Var. *coniifolium* (*Wall.*).

Var. *variegatum*, *Hort.*

A. atratum, *Wall.* See *Nephrodium hirtipes*.

A. auriculatum, *Sw.* East Indies.

A. Blumei. See *Nephrodium*.

A. capense, *Willd.* S. Temp. zone, &c.

A. caryotideum, *Wall.* See *falcatum*.

A. concavum, *Hort.* See *laserpitiifolium*.

A. confluens. See *Nephrodium*.

A. coniifolium, *Wall.* See *aristatum*.

A. erythrosorum, *Hort.* See *Nephrodium*.

A. Fadyeni. See *Fadyenia prolifera*.

A. falcatum, *Sw.* Japan, &c.

Var. *caryotideum* (*Wall.*). East Indies, &c.

* For garden varieties, see p. 145.

Aspidium, Swartz—*cont.*

A. falcatum, Sw. Japan, &c.—*cont.*

Var. *Fortunei* (*J. Sm.*). Japan.

Var. *pendulum*, *Hort.*

A. falcinellum, Sw. Madeira.

A. flexum, *Kze.* Juan Fernandez.

A. frondosum, *Lowe.* Madeira.

A. laserpitiifolium, *Mett.* Japan.

A. lepidocaulon, *Hook.* Japan.

A. lobatum, Sw. See *aculeatum*.

A. Lonchitis, Sw. N. temp. zone.

A. macrophyllum, *Hort.* See *Nephrodium*.

A. marginale. See *Nephrodium*.

A. meniscioides, *Schrad.* Tropical America.

A. mucronatum, Sw. West Indies.

A. munitum, *Kaulf.* W. North America.

Var. *imbricans*, *Hort.*

A. Plumieri, *Presl.* See *trifoliatum*.

A. proliferum, R. Br. See *aculeatum*.

A. pungens, *Kaulf.* South Africa.

A. repandum, *Willd.* Tropical Asia.

A. Richardi, *Hook.* New Zealand.

A. Standishii, *Hort.* See *laserpitiifolium*.

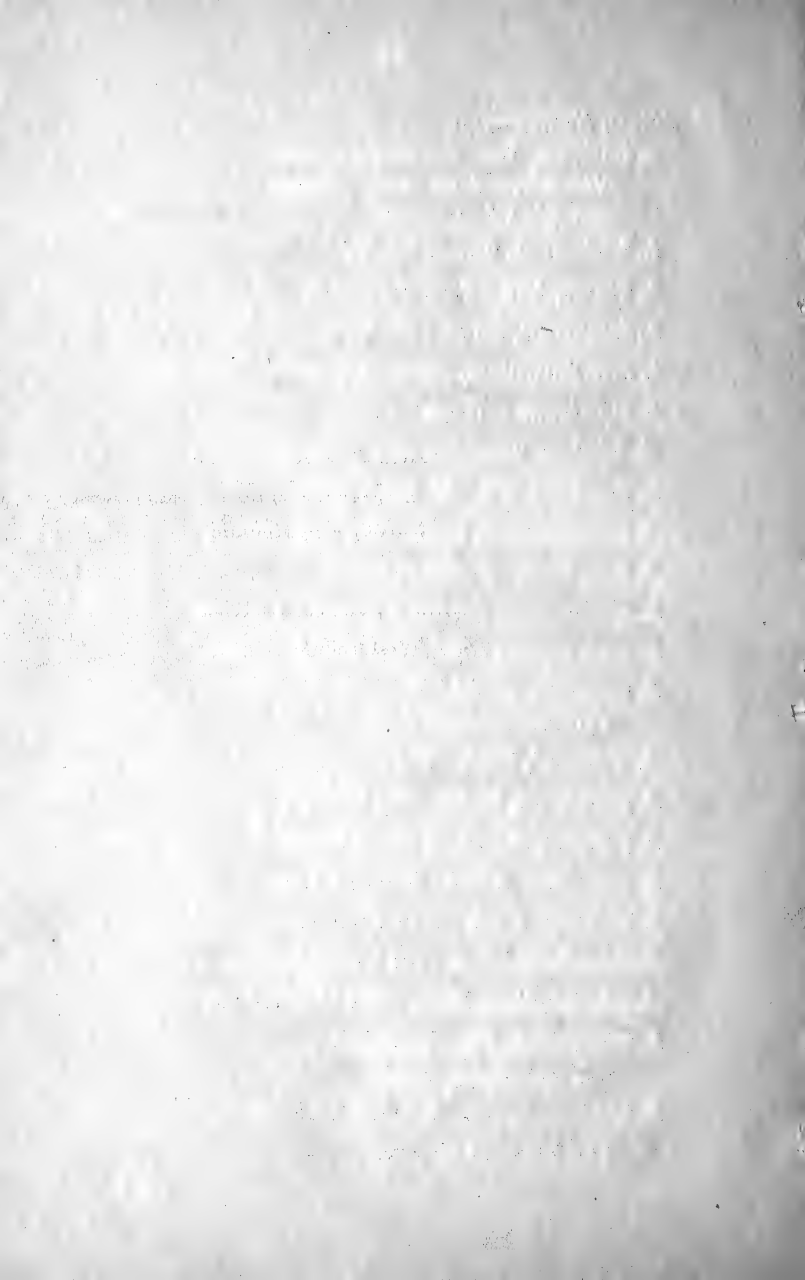
A. subtriphyllum, *Hook.* See *Nephrodium*.

A. triangulum, Sw. West Indies.

Var. *ilicifolium*, *Fee.*

A. trifoliatum, Sw. Tropical America.

Var. *Plumieri* (*Presl.*).



Aspidium, Swartz—cont.

A. tripterum, Kze. Japan.

A. uliginosum, Hort. See *Nephrodium cristatum*.

A. variolosum, Wall. See *Nephrodium*.

A. varium, Sw. Japan, &c.

A. vestitum, Sw. See *aculeatum*.

Asplenium, L.

A. abscissum, Willd. Tropical America.

A. achilleæfolium, Liebm. Mexico.

A. Adiantum-nigrum, L. North and South temp. zones.

Var. *acutum* (Willd.).

A. alatum, H. B. K. Tropical America.

A. angustifolium, Mich. North America.

A. anisophyllum, Kze. Natal.

A. apicidens, Moore. See *Vieillardii*.

A. arboreum, Willd. Tropical America.

A. Arnottii, Baker. Sandwich Islands.

A. attenuatum, R. Br. Australia.

Var. *integrum*, Hort.

A. aureum, Link. See *Ceterach*.

A. auritum, Sw. Tropical America.

Var. *macilentum* (Kze.).

Var. *rigidum* (Sw.).

A. australasicum, Hook. See *Nidus*.

A. axillare, Ait. See *umbrosum*.

A. bantamense, Baker. Tropical Asia.

A. Baptistii, Hort. See *Vieillardii*.

Asplenium, *L.*—*cont.*

- A. Belangeri*, *Kze.* Malayan Islands.
- A. brachypterum*, *Kze.* Tropical Africa.
- A. Bradleyi*, *Eaton.* North America.
- A. bulbiferum*, *Forst.* Australia, &c.
 - Var. *fabianum* (*H. & J.*).
 - Var. *laxum* (*R. Br.*).
 - Var. *minus*, *Baker.* New Zealand.
- A. caryotaefolium*, *Hort.* See *cuneatum*.
- A. caudatum*, *Forst.* Tropical and sub-tropical regions.
- A. celtidifolium*, *Kze.* Tropical America.
- A. Ceterach*, *L.* Europe and temp. Asia.
 - Var. *aureum* (*Link*).
- A. cicutarium*, *Sw.* Tropical America.
- A. Colensoi*, *Hook. fil.* New Zealand.
- A. compressum*, *Sw.* St. Helena.
- A. conchatum*, *Moore.* West Indies.
- A. contiguum*, *Kaulf.* Polynesia, &c.
 - Var. *fissum*, *Hort.*
- A. cordifolium*, *Mett.* Malaya, &c.
- A. costale*, *Sw.* West Indies and Peru.
- A. crenulatum*, *Baker.* Tropical America.
- A. cultrifolium*, *L.* West Indies.
- A. cuneatum*, *Lam.* Tropical America, &c.
- A. decurrens*, *Bedd.* India.
- A. decussatum*, *Sw.* Tropics of Old World.
- A. dilatatum*, *Hook.* See *latifolium*.

Asplenium, *L.*—*cont.*

A. dimidiatum, *Sw.* Tropical America.

A. dimorphum, *Kze.* Norfolk Island.

A. divaricatum, *Kze.* Chili and Peru.

A. ebenenum, *Ait.* Temp. regions.

A. elongatum, *Sw.* *See tenerum.*

A. erectum, *Bory.* *See lunulatum.*

A. erosum, *L.* West Indies.

A. esculentum, *Presl.* Tropical Asia.

Var. *glabrum*, *Hort.*

Var. *serampurens* (*Spr.*).

A. fabianum, *H. & J.* *See bulbiferum.*

A. falcatum, *Lam.* Tropics and sub-tropics, Old World.

Var. *erosum*, *Hort.*

A. fernandezianum, *Kze.* *See lunulatum.*

A. fijiense, *Brack.* Fiji Islands.

*A. *Filix-fœmina*, *Bernh.* Ubiquitous.

A. firmum, *Kze.* *See abscissum.*

A. flabellifolium, *Cav.* Australia.

A. flaccidum, *Forst.* Australia, &c.

A. fontanum, *Bernh.* North temp. zone.

A. formosum, *Willd.* Tropical America.

A. fragrans, *Sw.* Tropical America.

Var. *fœniculaceum* (*H. B. K.*)

* For garden varieties, *see* p. 157.

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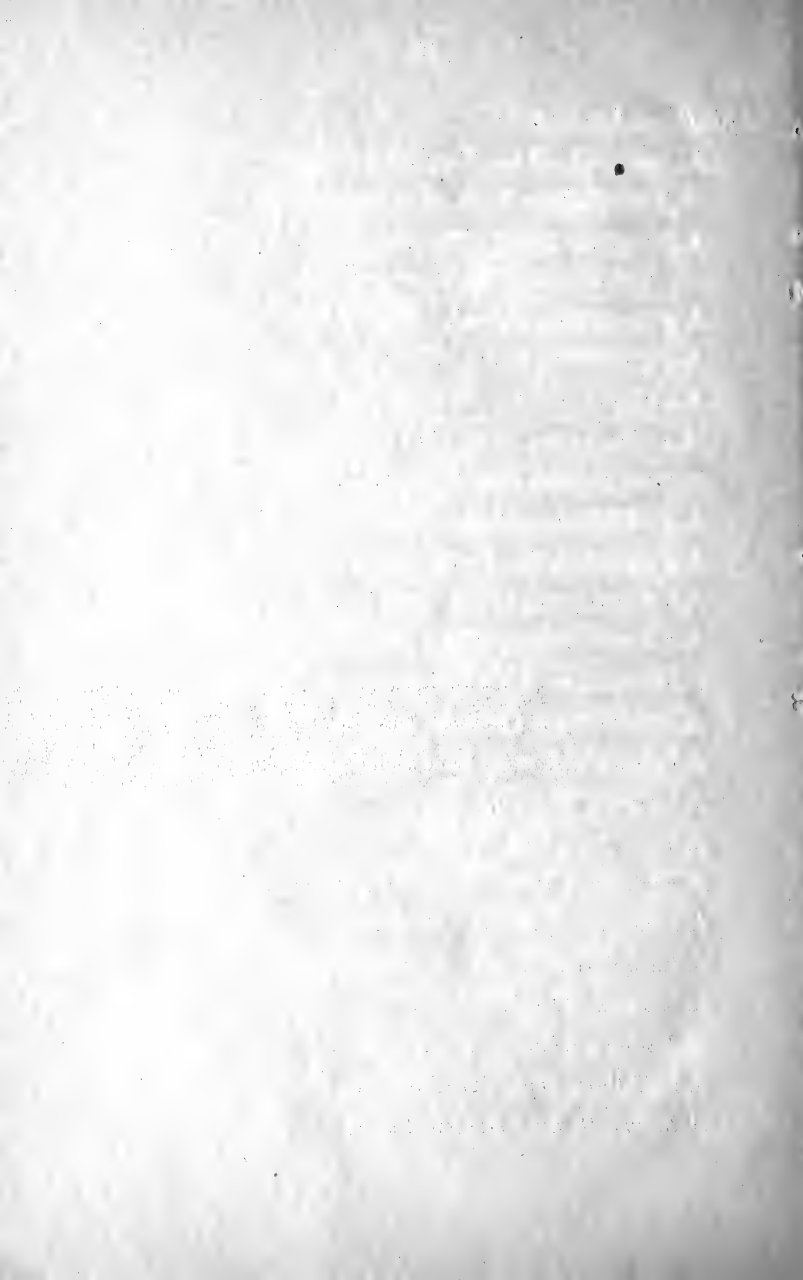
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Asplenium, *L.*—*cont.*

- A. Françonis*, *Mett.* Tropical America.
- A. fraxinifolium*, *Wall.* See *bantamense*.
- A. furcatum*, *Thunb.* Tropical and sub-tropical regions.
 Var. tripinnatum, *Baker.* Natal.
- A. gemmiferum*, *Schrad.* South Africa.
- A. germanicum*, *Weiss.* Europe.
- A. Godmani*, *Baker.* West Indies.
- A. goringianum*, *Mett.* See *macrocarpum*.
- A. grandifolium*, *Sw.* Tropical America.
- A. griffithianum*, *Hook.* Himalaya.
- A. Hemionitis*, *L.* South Europe and North Africa.
- A. heterocarpum*, *Wall.* East Indies.
- A. heterophlebium*, *Mett.* Himalaya.
- A. hians*, *Kze.* West Indies.
- A. hookerianum*, *Colenso.* New Zealand.
- A. horridum*, *Kaulf.* Sandwich Islands, &c.
- A. incisum*, *Thb.* Japan.
- A. japonicum*, *Thb.* Japan.
- A. Klotzschii*, *Mett.* Colombia and Venezuela.
- A. laffanianum*, *Baker.* Bermuda.
- A. lanceolatum*, *Huds.* Europe.
- A. lanceum*, *Thunb.* Japan.
- A. lasiopteris*, *Mett.* See *Peterseni*.
- A. latifolium*, *Don.* Tropical Asia.
- A. laxum*, *R. Br.* See *bulbiferum*.



Asplenium, *L.*—*cont.*

A. lineatum, *Sw.* Mauritius.

Var. *bifidum* (*Presl*).

A. longissimum, *Bl.* Java, &c.

A. lucidum, *Forst.* See *obtusatum*.

A. lunulatum, *Sw.* Tropics.

Var. *erectum* (*Bory*).

Var. *lobatum* (*P. & R.*). South Africa.

Var. *pteropus* (*Kaulf.*). Tropical America.

Var. *fernandezianum* (*Kze.*).

Var. *tenellum* (*Roxb.*). St. Helena, &c.

Var. *tripinnatifidum*, *Hort.*

A. macilentum, *Kze.* See *auritum*.

A. macrocarpum, *Bl.* Tropical Asia.

Var. *goringianum* (*Mett.*).

A. macrophyllum, *Sw.* Tropical Asia.

A. marginatum, *L.* Tropical America.

A. marinum, *L.* Europe, &c.

Var. *imbricatum*, *Hort.*

Var. *ramosum*, *Hort.*

A. maximum, *Don.* West Indies to Ceylon.

A. Michauxii, *Spreng.* See *Filix fœmina*.

A. monanthemum, *L.* Temperate regions.

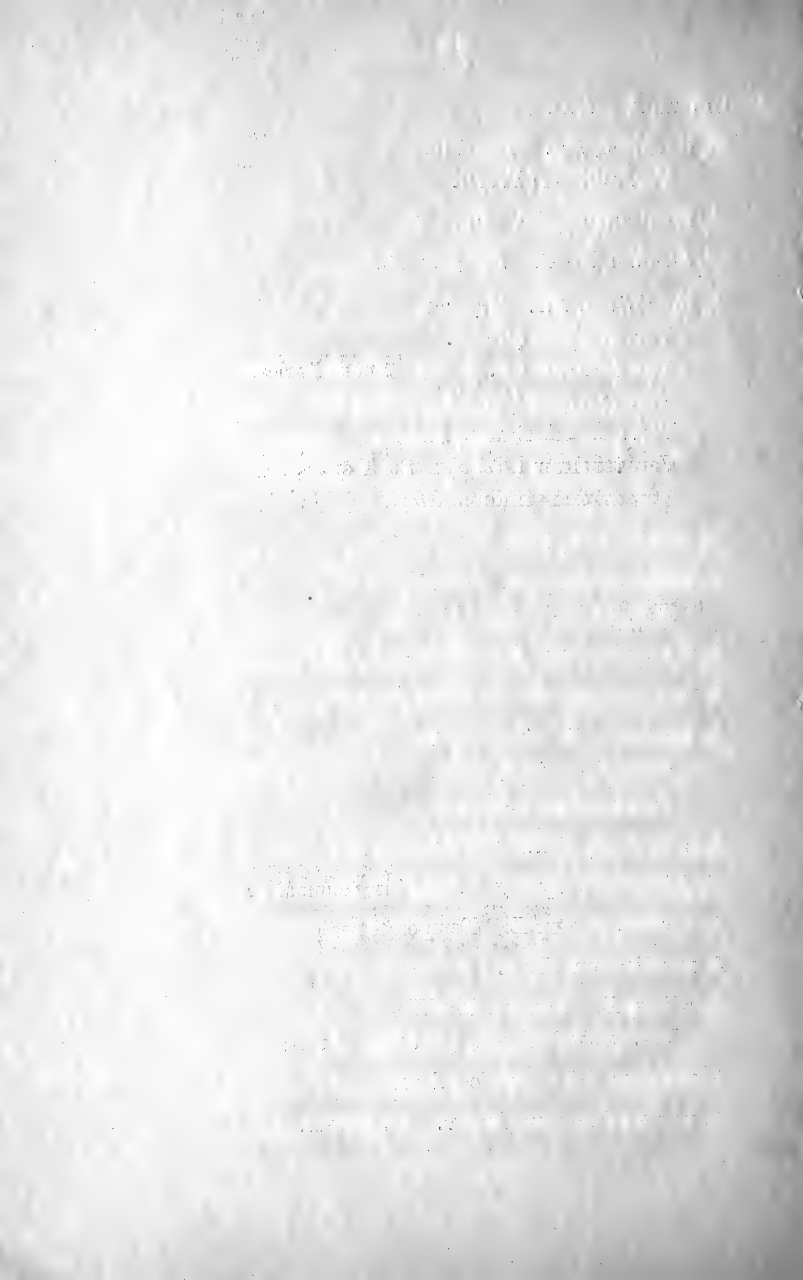
A. monticulum, *Jenm.* Jamaica.

A. Nidus, *L.* Tropics, Old World.

Var. *australasicum*, (*Hook.*). Australia.

A. nigripes, *Bl.* Tropical Asia.

A. nigro-paleaceum, *Baker.* St. Helena.



Asplenium, *L.*—*cont.*

A. niponicum, *Mett.* Japan.

Var. *cristatum*, *Hort.*

A. nitens, *Sw.* Mauritius.

A. nitidum, *Sw.* East Indies.

A. nobile, *Hort.* See *viviparum*.

A. nodulosum, *Hort.* See *lineatum*.

A. novæ-caledoniæ, *Hook.* New Caledonia.

A. obliquum, *Forst.* See *obtusatum*.

A. obtusatum, *Forst.* Australia, &c.

Var. *lucidum* (*Forst.*).

Var. *Lyallii*, *Hook.* New Zealand.

Var. *obliquum* (*Forst.*).

A. obtusifolium, *L.* Tropical America.

A. obtusilobum, *Hook.* Polynesia.

A. oligophyllum, *Kaulf.* Tropical America.

A. paleaceum, *R. Br.* Tropical Australia.

A. paradoxum, *Bl.* Java, &c.

A. Peterseni, *Kze.* East Indies.

Var. *lasiopteris* (*Mett.*).

A. planicaule, *Wall.* Himalaya.

A. plantagineum, *L.* Tropical America.

A. polyodon, *Forst.* See *falcatum*.

A. polypodioides, *Mett.* Tropical Asia.

A. præmorsum, *Sw.* See *furcatum*.

A. proliferum, *Lam.* See *decussatum*.

A. prolongatum, *Hort.* See *rutæfolium*.

A. pteridoides, *Baker.* Lord Howe's Island.

Asplenium, *L.*—*cont.*

- A. pteropus*, Kaulf. *See* *lunulatum*.
A. pubescens, Hort. *See* *esculentum*.
A. reclinatum, Moore. *See* *lunulatum*.
A. refractum, Moore. *See* *fontanum*.
A. resectum, Sm. Tropical Asia.
A. rhizophyllum, Kze. Tropical America.
A. rhizophorum, L. Tropical America.
A. rutæfolium, Kze. Ceylon, South Africa, &c.
 Var. *prolongatum* (*Hook.*).
A. Ruta-muraria, L. North temp. zone.
A. scandens, J. Sm. New Guinea and Philippines.
A. Schimperii, A. Br. East Africa.
A. semihastatum, Kze. Cuba.
A. septentrionale, Hoffm. North temp. zone.
A. Serra, L. & F. Tropical America.
 Var. *natalensis*.
A. serratum, L. Tropical America.
A. Shepherdii, Spreng. Tropical America.
A. sinuatum, Beauv. Tropical Africa.
A. speciosum, Mett. Tropical Asia.
A. splendens, Kze. South Africa.
A. squamulatum, Bl. East Indies.
A. striatum, L. *See* *Shepherdii*.
A. sylvaticum, Presl. Tropics.
A. tenellum, Roxb. *See* *lunulatum*.

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Asplenium, *L.*—*cont.*

A. tenerum, *Forst.* Malaya, &c.

Var. *elongatum* (*Sw.*).

A. thelypteroides, *Mich.* North America.

A. Thwaitesii, *A. Br.* Ceylon, &c.

A. tomentosum, *Hook.* East Indies, &c.

*A. *Trichomanes*, *L.* Temp. regions.

A. umbrosum, *J. Sm.* Madeira.

Var. *tenuifolium*, *Kirk.* New Zealand.

A. vagans, *Baker.* Isle of St. Thomas.

A. unilaterale, *Lam.* See *resectum*.

A. veitchianum, *Moore.* See *Belangeri*.

A. Vieillardii, *Mett.* New Caledonia.

Var. *apicidens* (*Moore*).

Var. *Baptistii* (*Hort.*).

A. viride, *Huds.* North temp. zone.

A. viviparum, *Presl.* Mauritius.

Var. *nobile*, *Hort.*

A. zamiioides, *Hook.* See *paradoxum*.

A. zeylanicum, *Hook.* Ceylon.

Athyrium. See *Asplenium*.

Balantium. See *Dicksonia*.

Blechnum, *L.*

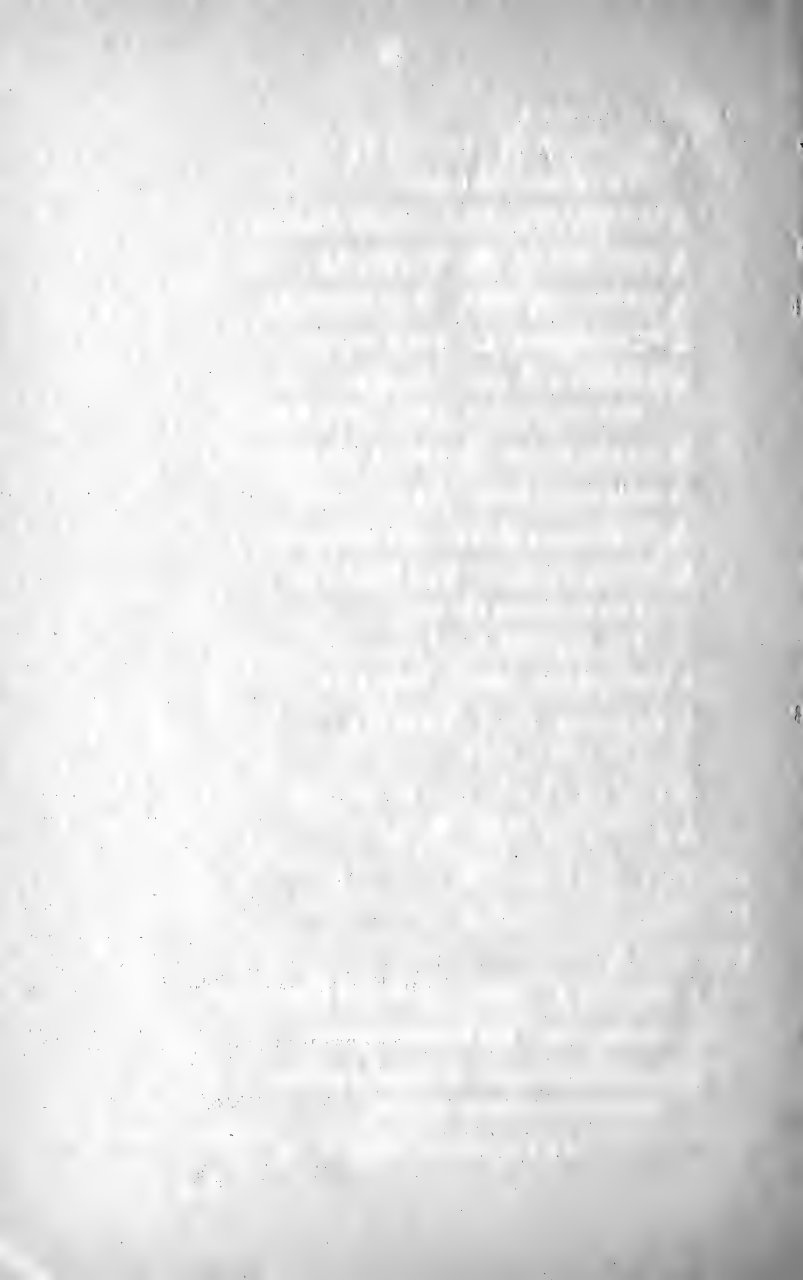
B. australe, *L.* South Africa and Madagascar.

B. boreale, *Sw.* See *Lomaria Spicant*.

B. brasiliense, *Desv.* Tropical America.

Var. *corcovadense* (*Raddi*).

* For garden varieties, see p. 169.



Blechnum, Linn.—cont.

- B. cartilagineum*, Sw. Australia.
- B. corcovadense*, Raddi. See *brasiliense*.
- B. Gilliesii*. See *Lomaria procera*.
- B. glandulosum*, Link. See *occidentale*.
- B. gracile*, Kaulf. See *longifolium*.
- B. hastatum*, Kaulf. Temperate South America.
- B. lanceola*, Sw. Tropical America.
- B. latifolium*, Hort. See *longifolium*.
- B. longifolium*, H. B. K. Tropical America.
 Var. *fraxineum* (Willd.).
 Var. *gracile* (Kaulf.).
- B. melanopus*, Hook. India.
- B. occidentale*, L. Tropical America.
 Var. *glandulosum* (Link).
- B. polypodioides*, Raddi. See *unilaterale*.
- B. punctulata*. See *Lomaria*.
- B. rugosum*, Moore. Origin unknown.
- B. triangulare*, Link. See *unilaterale*.
- B. unilaterale*, Willd. Tropical America.
- B. volubile*, Kaulf. Tropical America.

Bolbitis. See *Acrostichum*.

Botrychium, Swartz.

- B. Lunaria*, Sw. Temperate regions.
- B. ternatum*, Sw. North and south temp. zones.
 Var. *dissectum*, Muhl.
- B. virginianum*, Sw. North and south temp. zones.



Brainea, Hook.

B. insignis, Hook. Hong Kong and Khasia.

Cænopteris. See *Asplenium*.

Callipteris. See *Asplenium*.

Campyloneuron. See *Polypodium*.

Camptosorus. See *Scolopendrium*.

Campteria. See *Pteris*.

Cassebeera, Kaulf.

C. triphylla, Kaulf. South Brazil.

Cephalomanes. See *Trichomanes*.

Ceratopteris, Brong.

C. thalictroides, Brong. Tropics.

Ceropteris. See *Gymnogramme*.

Ceterach. See *Asplenium*.

Cheilanthes, Swartz.

C. alabamensis, Baker. North America.

C. californica, Harv. See *Hypolepis*.

C. chlorophylla, Sw. Tropical America.

C. Clevelandii, Eaton. California.

C. dicksonioides, Endl. See *Hypolepis tenuifolia*.

C. elegans, Desv. See *myriophylla*.

C. ellisiana, Hort. See *hirta*.

C. farinosa, Kaulf. Tropics everywhere.

Var. *anceps* (*Blandf.*). Himalaya.

Var. *punctata, Hort.*

C. fragrans, W. & B. Europe, &c.

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Cheilanthes, Swartz.—cont.

C. hirta, Sw. South America.

Var. *ellisiana*, Hort.

C. multifida, Sw. St. Helena.

C. myriophylla, Desv. Tropical America.

Var. *elegans*, (Desv.).

C. profusa, Kze. See *Pellæa involuta*.

C. pulveracea, Hook. See *Nothochlæna sulphurea*.

C. radiata, R. Br. Tropical America.

C. spectabilis, Kaulf. See *chlorophylla*.

C. tomentosa, Link. North Carolina, &c.

C. vestita, Sw. North America.

Chrysodium. See *Acrostichum*.

Cibotium. See *Dicksonia*.

Cincinalis. See *Nothochlæna*.

Cionidium. See *Déparia*.

Coniogramme. See *Gymnogramme*.

Craspedaria. See *Polypodium*.

Cryptogramme, R. Br.

C. crispa, R. Br. North temp. zone.

Cyathea, Smith.

C. arborea, J. Sm. Tropical America.

C. beyrichiana. See *Hemitelia setosa*.

C. dealbata, Sw. New Zealand.

Var. *tricolor* (Col.).

C. Dregei, Kze. Tropical Africa.

Var. *Burkei*, Hook. South Africa.



Cyathea, *Smith*—*cont.*

C. Hookeri, *Thw.* Ceylon.

C. imrayana, *Hook.* *See* *Tussacii*.

C. insignis, *Eaton.* West Indies.

C. medullaris, *Sw.* New Zealand.

C. mexicana, *Schlecht.* Mexico.

C. princeps, *J. Sm.* *See* *insignis*.

C. Schanschin, *Mart.* South America.

C. serra, *Willd.* Tropical America.

C. Smithii, *Hook.* *See* *Hemitelia Smithii*.

C. spinulosa, *Wall.* India.

C. tricolor, *Col.* *See* *dealbata*.

C. Tussacii, *Desv.* West Indies.

C. sinuata, *H. & G.* Ceylon.

Cyclodium. *See* *Aspidium*.

Cyclopeltis. *See* *Aspidium*.

Cyrtogonium. *See* *Acrostichum*.

Cyrtomium. *See* *Aspidium*.

Cyrtophlebium. *See* *Polypodium*.

Cystopteris, *Bernh.*

C. alpina, *Desv.* Europe.

C. bergiana. *See* *Hypolepis*.

C. bulbifera, *Bernh.* North America.

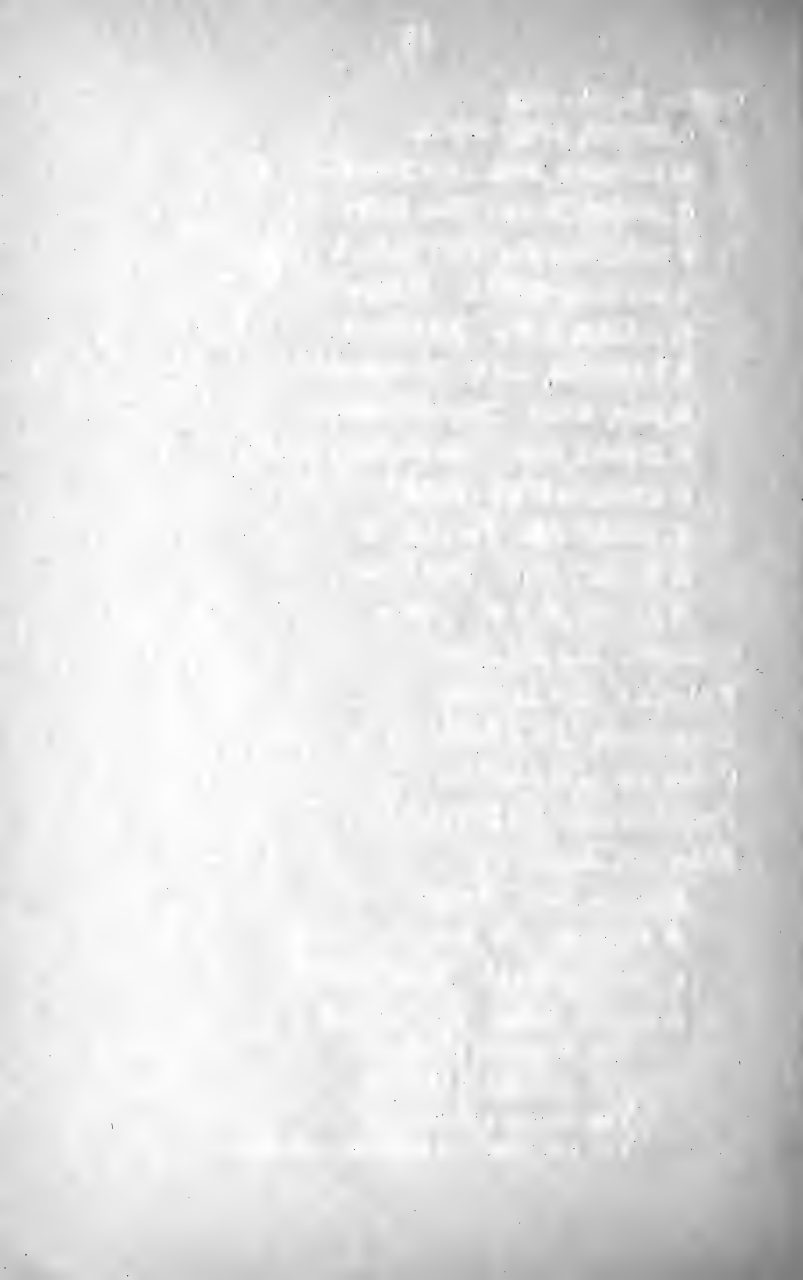
C. fragilis, *Bernh.* Cosmopolitan.

Var. *angustata* (*Sm.*).

Var. *canariensis* (*Moore*).

Var. *dickeana* (*Moore*).

Var. *sempervirens* (*Moore*). Madeira.



Cystopteris, Bernh.—cont.*C. montana*, Link. Europe.*C. tenuis*, Schott. See *fragilis*.*Darea*. See *Asplenium*.*Davallia*, Smith.*D. aculeata*, Sw. West Indies.*D. affinis*, Hook. Tropical and sub-tropical Asia.*D. alpina*, Bl. Malaya, &c.*D. angustata*, Wall. Tropical Asia.*D. assamica*, Baker. Bhotan.*D. bullata*, Wall. Tropical Asia.Var. *decora* (Moore). Java.Var. *Mariesii* (Moore). Japan.*D. canariensis*, Sm. Europe and Canaries.Var. *alopecuroides*.*D. chærophylla*, Wall. East Indies.*D. ciliata*, Hook. Philippines.*D. concinna*, Schr. Tropical Africa and America.*D. cristata*, J. Sm. See *strigosa*.*D. decorata*, Moore. See *bullata*.*D. dissecta*, J. Sm. Java.*D. divaricata*, Bl. Malaya.*D. elata*, Sw. See *elegans*.*D. elegans*, Sw. Tropical Asia, &c.Var. *elata* (Sw.).Var. *Kunzei*, Hort. Malaya.Var. *polydactyla*, Hort.*D. epiphylla*, Bl. Java.

Davallia, Smith—cont.

- D. ferruginea*, Desv. Madagascar.
- D. fijiensis*, Hook. Fiji Islands.
 Var. *major*, Hort.
 Var. *plumosa*, Hort.
- D. fœniculacea*, Hook. Fiji.
- D. griffithiana*, Hook. Himalaya, &c.
- D. hemiptera*, Bory. See *repens*.
- D. heterophylla*, Sm. Tropical Asia.
- D. hirsuta*, Sw. Japan, &c.
 Var. *angustata*.
- D. hirta*, Kaulf. Tropical and sub-tropical Asia.
 Var. *cristata*.
- D. immersa*, Wall. Tropical and sub-tropical Asia.
- D. khasyana*, Hook. See *strigosa*.
- D. kunzeana*, Hook. See *davallioides*.
- D. Lindleyi*, Hook. See *solida*.
- D. Lorrainei*, Hance. Malaya.
- D. lonchitidea*, Wall. See *platyphylla*.
- D. lucida*, Hort. See *solida*.
- D. marginalis*, Baker. Tropical Asia.
- D. Mariesii*, Moore. See *bullata*.
- D. membranulosa*, Wall. East Indies.
- D. mooreana*, Masters. See *pallida*.
- D. multidentata*, Hk. Himalaya.
- D. Novæ zealandiæ*, Col. New Zealand.
- D. ornata*, Wall. See *solida*.

Davallia, Smith—cont.

- D. pallida*, *Mett.* Malaya and Polynesia.
- D. parvula*, *Wall.* Malaya.
- D. pedata*, *Sm.* Tropical and sub-tropical Asia.
- D. pentaphylla*, *Bl.* Malaya.
- D. pinnata*, *Cav.* East Indies.
- D. platyphylla*, *Don.* East Indies.
- D. polyantha*, *Hook.* *See* *divaricata*.
- D. polypodioides*, *Don.* *See* *Speluncæ*.
- D. pulchra*, *Don.* Himalaya.
- D. pycnocarpa*, *Brack.* *See* *pentaphylla*.
- D. pyxidata*, *Cav.* Australia.
- D. repens*, *Desv.* East Indies.
- D. retusa*, *Cav.* *See* *Lindsaya retusa*.
- D. rhomboidea*, *Wall.* Tropical and sub-tropical Asia.
- D. rubiginosa*, *Kaulf.* Tropical America.
- D. scabra*, *Don.* *See* *marginalis*.
- D. solida*, *Sw.* Tropical Asia and Africa.
 Var. *Lindleyi* (*Hook.*).
 Var. *ornata* (*Wall.*).
- D. Speluncæ*, *Baker.* Tropics, ubiquitous.
- D. strigosa*, *Sw.* Tropical and sub-tropical Asia.
 Var. *rhomboidea* (*Wall.*). North India.
- D. tenuifolia*, *Sw.* Tropics of Old World.
 Var. *stricta*, *Hort.*
 Var. *Veitchii*, *Hort.*
- D. trichosticha*, *Hook.* *See* *Speluncæ*.

Davallia, Smith—cont.

D. Tyermanni, *Baker*. China.

D. vestita, *Bl.* Java and Ceylon.

D. villosa, *Wall.* See *marginalis*.

Dennstædtia. See *Dicksonia*.

Diacalpe, Blume.

D. aspidioides, *Bl.* Tropical Asia.

D. fœniculacea, *C. B. Cl.* See *Aspidium fœniculaceum*.

Dicksonia, Smith.

D. adiantoides, *H. B. K.* Tropical America.

D. antarctica, *Lab.* Australia.

D. apiifolia, *Hook.* Andes of Ecuador and Peru.

D. Barometz, *Link.* Sub-tropical Asia.

D. berteriana, *Hook.* Juan Fernandez.

D. Billardieri. See *antarctica*.

D. Chamissoi, *Hook. fil.* Sandwich Islands.

D. cicutaria, *Sw.* Tropical America.

D. Culcita, *L'Herit.* Madeira, Azores, and Spain.

D. davallioides, *R. Br.* Australia.

D. Deplanchei, *Vieill.* New Caledonia.

D. fibrosa, *Col.* New Zealand.

D. gracilis, *Col.* New Zealand.

D. Herberti, *Moore.* Queensland.

D. Lathamii, *Moore.* Garden origin.

D. Menziesii, *H. & B.* Sandwich Islands.

D. obtusifolia, *Willd.* See *adiantoides*.

D. princeps, *Hort.* See *Cyathea insignis*.

Dicksonia, *Smith*—*cont.*

D. regalis, *Baker*. Mexico.

D. Schiedei, *Baker*. Tropical America.

D. sellowiana, *Hook*. South Brazil.

Var. *karsteniana* (*Klotzch*).

D. spectabilis, *Hort*. See *Wendlandi*.

D. squarrosa, *Sw*. New Zealand.

D. tenera, *Hort*. See *apiifolia*.

D. Wendlandi, *Baker*. Guatemala.

Var. *Verschaffeltii*, *Hort*.

D. Youngiæ, *C. Moore*. New South Wales.

Dictyogramme. See *Gymnogramme*.

Dictyopteris. See *Polypodium*.

Didymochlæna, *Desv.*

D. lunulata, *Desv.* Tropics everywhere.

D. sinuosa, *Desv.* See *lunulata*.

D. truncatula, *J. Sm.* See *lunulata*.

Didymoglossum. See *Hymenophyllum*.

Diplazium. See *Asplenium*.

Dipteris. See *Polypodium*.

Disphenia. See *Cyathea*.

Doodia, *R. Br.*

D. aspera, *R. Br.* Australia.

Var. *multifida*, *Hort*.

D. blechnoides, *Cun.* Australia.

D. caudata, *R. Br.* Australia and New Zealand.

Var. *scabrida*.

THE HISTORY OF THE

REIGN OF KING CHARLES THE FIRST

IN WHICH ARE CONTAINED THE

CAUSES, THE CONDUCT, AND THE

CONSEQUENCES OF THE

REBELLION AND CIVIL WARS

IN GREAT BRITAIN

FROM THE YEAR 1625 TO 1649

BY SAMUEL JOHNSON

IN TWO VOLUMES

LONDON: Printed by A. MILLAR, in the Strand, 1765.

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Doodia, R. Br.—cont.

D. dives, Kze. Ceylon.

D. kunthiana, Gaud. Sandwich Islands.

D. lunulata, R. Br. See *media*.

D. media, R. Br. Australia and New Zealand.

Doryopteris. See *Pteris*.

Drymoglossum, Presl.

D. carnosum, Hook. East Himalaya.

Var. *subcordatum* (Fee.). China and Japan.

D. piloselloides, Presl. Tropical Asia.

Drynaria. See *Polypodium*.

D. diversifolia, J. Sm. See *Polypodium rigidulum*.

D. morbillosa, J. Sm. See *P. Heracleum*.

Egenolfia. See *Acrostichum*.

Elaphoglossum. See *Acrostichum*.

Eupodium. See *Marattia*.

Fadyenia, Hook.

F. prolifera, Hook. West Indies.

Feea. See *Trichomanes*.

Gleichenia, Smith.

G. circinata, Sw. Australia and New Zealand.

Var. *Mendelii, Hort.* Australia.

Var. *microphylla* (R. Br.).

Var. *semivestita* (Lab.).

Var. *Speluncæ* (R. Br.).

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Gleichenia, *Smith*—cont.

G. dicarpa, *R. Br.* Australia and New Zealand.

Var. *alpina* (*R. Br.*).

Var. *glauca*, *Moore*.

Var. *longipinnata*, *Hort.*

G. dichotoma, *Willd.* Tropical and sub-tropical regions.

Var. *nana*, *Hort.*

G. excelsa, *Sm.* See *longissima*.

G. flabellata, *R. Br.* Australia, &c.

G. longipinnata, *Hort.* See *dicarpa*.

G. longissima, *Bl.* Tropics.

G. rupestris, *R. Br.* Australia.

Var. *gigantea*, *Hort.*

Var. *glaucescens*, *Hort.*

Goniophlebium. See *Polypodium*.

Goniopteris. See *Polypodium*.

Gymnogramme, *Desv.*

G. ampla, *Baker.* Australia.

G. calomelanos, *Kaulf.* Tropical America.

Var. *Alstoni*, *Hort.*

Var. *chrysophylla* (*Kaulf.*).

Var. *cristata*, *Hort.*

Var. *laucheana* (*K. Koch*).

Var. *grandiceps*, *Hort.*

Var. *Martensii* (*Kaulf.*).

Var. *Massoni*, *Hort.*

Var. *peruviana* (*Desv.*).

Var. *Parsonsi*, *Hort.*

G. cantoniensis, *Baker.* China.

Gymnogramme, *Desv.*—*cont.*

- G. caudiformis*, *Hook.* Tropical Asia.
- G. chrysophylla*, *Kaulf.* See *calomelanos*.
- G. decomposita*, *Baker.* Garden origin.
- G. decurrens*, *Hook.* See *elliptica*.
- G. diplazioides*, *Desv.* Tropical America.
- G. dobroydense*, *Hort.* Garden origin.
- G. elegantissima*, *Hort.* See *decomposita*.
- G. elliptica*, *Baker.* Tropical Asia, &c.
- G. Feei*, *Hook.* Malaya.
- G. fraxinea*, *Don.* See *javanica*.
- G. gracilis*, *Hew.* Jamaica.
- G. hamiltoniana*, *Hook.* E. Himalaya.
- G. japonica*, *Hook.* Japan, &c.
- G. leptophylla*, *Desv.* Cosmopolitan.
- G. laucheana*, *K. Koch.* See *calomelanos*.
- G. L'Herminieri*, *Link.* See *calomelanos*.
- G. linkiana*, *Kze.* See *diplazioides*.
- G. Mathewsii*, *Hook.* Peru.
- G. Muelleri*, *Hook.* Australia.
- G. multiceps*, *Hort.* See *calomelanos*.
- G. Parsonsii.* See *calomelanos*.
- G. Pearcei*, *Moore.* Peru.
- Var. *robusta*, *Hort.*
- G. peruviana*, *Desv.* See *calomelanos*.
- G. pulchella*, *Linden.* Tropical America.
- Var. *wettenhalliana*, *Hort.*
- Var. *Mayi*, *Hort.*

Gymnogramme, Desv.—cont.

G. rupestris, Kze. See diplazioides.

G. schizophylla, Baker. Jamaica.

Var. *gloriosa*, Hort.

G. sulphurea, Desv. West Indies.

Var. *grandiceps*, Hort.

G. tartarea, Desv. Tropical America.

G. tomentosa, Desv. South America.

G. Totta, Schlecht. Tropics.

G. triangularis, Kaulf. Vancouver Island, &c.

G. trifoliata, Desv. Tropical America.

G. vestita, Hk. N. Himalaya, &c.

Gymnopteris. See *Acrostichum*.

Haplopteris. See *Vittaria*.

Helminthostachys, Kaulf.

H. dulcis, Kaulf. See *zeylanica*.

H. zeylanica, Hook. Tropical Asia, &c.

Hemidictyum. See *Asplenium*.

Hemionitis, L.

H. cordata, Roxb. East Indies.

H. palmata, L. Tropical America.

Hemitelia, R. Br.

H. brunoniana, C. B. Cl. Himalaya.

H. capensis, R. Br. S. Africa and Brazil.

H. horrida R. Br. West Indies, &c.

H. setosa, Mett. Brazil.

H. Smithii, Hook. New Zealand.

H. Walkeræ, Hook. Ceylon.

Humata. *See* Davallia.

Hymenodium. *See* Acrostichum.

Hymenolepis. *See* Acrostichum.

Hymenophyllum, *Smith*.

H. abruptum, *Hook*. Jamaica and South America.

H. æruginosum, *Carm*. Isle of Tristan d'Acunha.

H. asplenioides, *Sw*. Tropical America, &c.

H. bivalve, *Sw*. New Zealand.

H. Catherinæ, *Hook*. Jamaica.

H. caudiculatum, *Mart*. Tropical America, &c.

H. chilense, *Hook*. Isle of Chiloe, &c.

H. ciliatum, *Sw*. Tropical America.

H. crispum, *H. B. K*. Tropical America.

H. cruentum, *Cav*. Chili.

H. demissum, *Sw*. Australia and New Zealand.

Var. *nitens*, *Hort*.

H. dilatatum, *Sw*. New Zealand, &c.

Var. *forsterianum*, (*Hort*).).

H. elegans, *Spr*. *See* lineare.

H. elegantulum, *V. D. B*. Andes.

H. flabellatum, *Lab*. Australia and New Zealand.

H. forsterianum, *Hort*. *See* dilatatum.

H. fuciforme, *Sw*. Chili and Juan Fernandez.

H. fucoides, *Sw*. Tropical America.

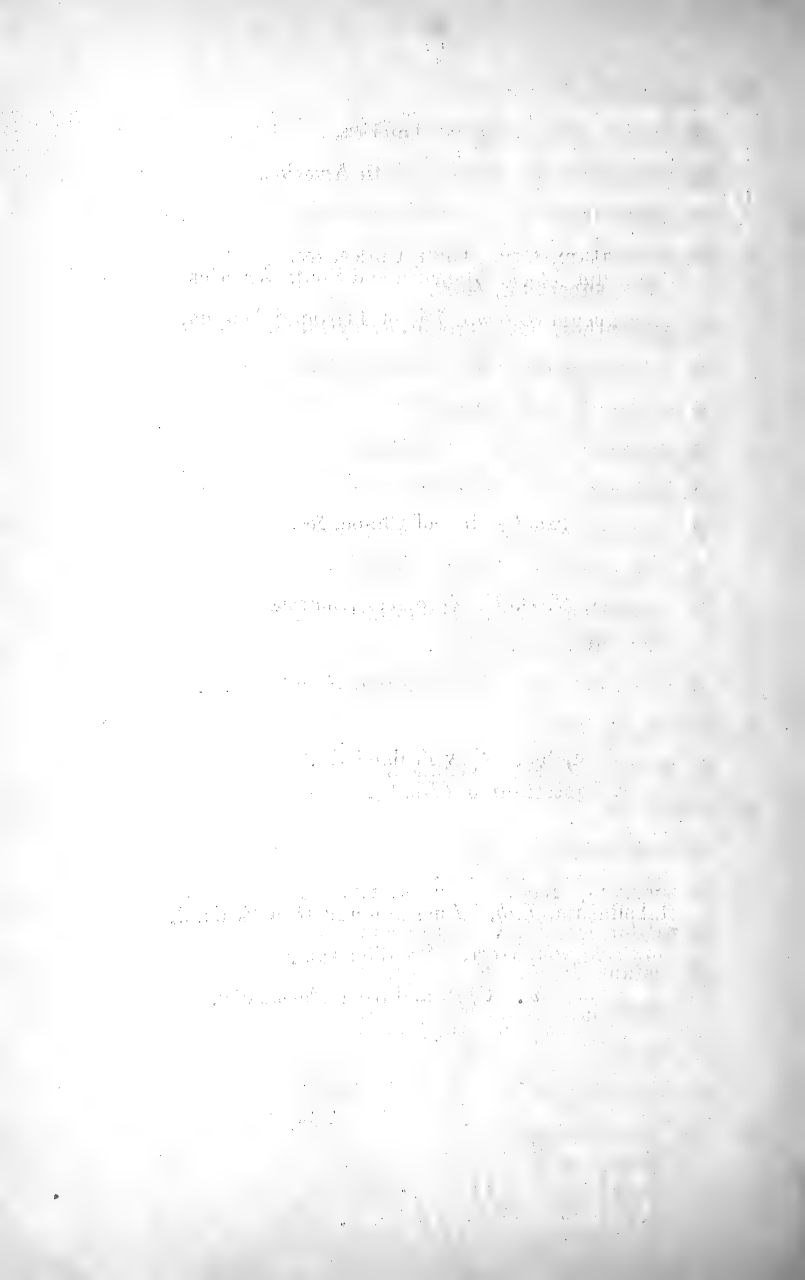
H. hirsutum, *Sw*. Tropical America.

H. javanicum, *Spreng*. Tropical Asia, &c.

Var. *crispatum* (*Wall*).).

Var. *flexuosum* (*Cunn*).).

Var. *tamariscifolium* (*Hort*).).



Hymenophyllum, *Smith*—cont.

H. lineare, *Sw.* Tropical America.

H. magellanicum, *Willd.* South America.

H. multifidum, *Sw.* New Zealand and Pacific Isles.

H. pectinatum, *Cav.* Chili, Chiloe, &c.

Var. *superbum*, *Hort.*

H. polyanthos, *Sw.* Tropics everywhere.

H. pulcherrimum, *Col.* New Zealand.

H. rarum, *R. Br.* Mauritius, New Zealand, &c.

H. scabrum, *A. Rich.* New Zealand.

H. sericeum, *Sw.* Tropical America.

H. subtilissimum, *Kze.* New Zealand.

H. tamariscifolium, *Hort.* See *javanicum*.

H. tunbridgense, *Sw.* Ubiquitous.

Var. *Wilsoni*, *Hook.*

H. villosum, *Col.* See *polyanthos*.

Hypoderris, *R. Br.*

H. Brownii, *J. Sm.* Trinidad.

Hypolepis, *Bernh.*

H. anthriscifolia, *Presl.* Tropical Africa.

H. bergiana, *Hook.* South Africa.

H. californica, *Hook.* California.

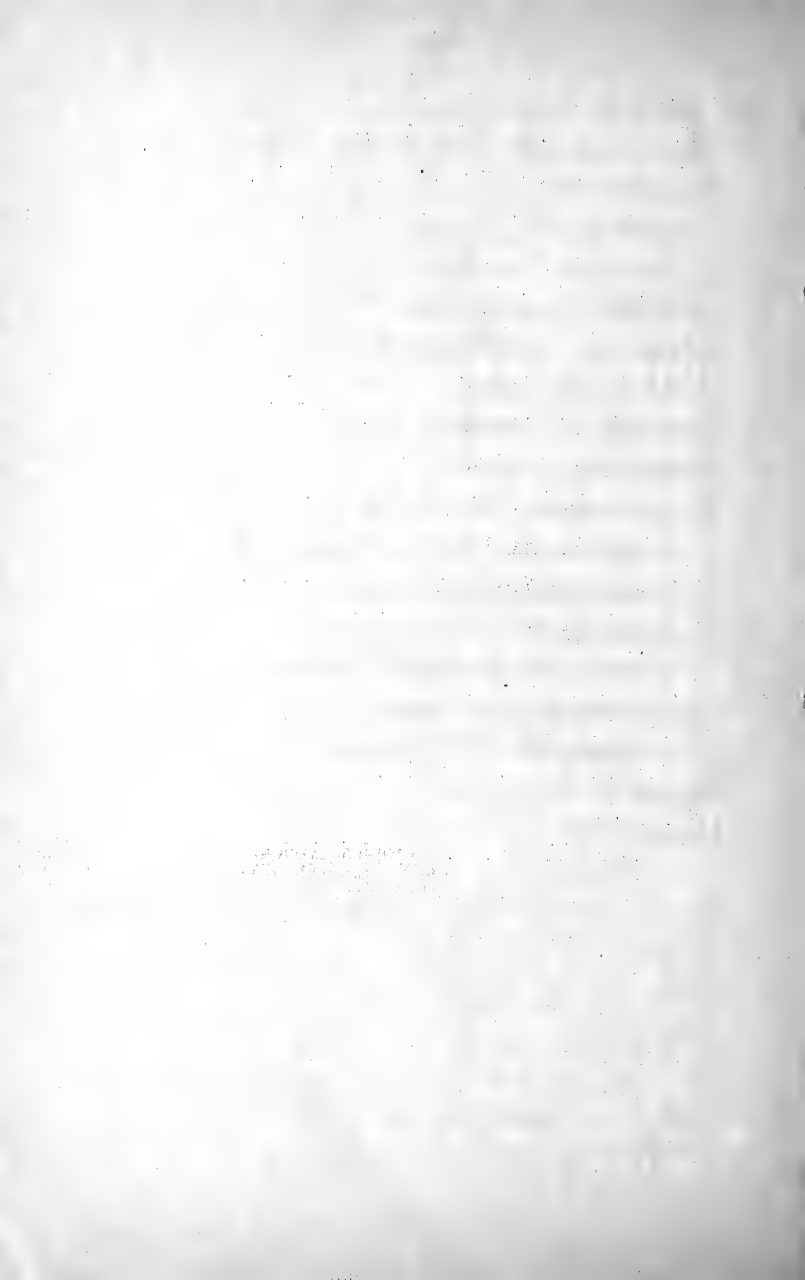
H. distans, *Hook.* New Zealand.

H. millefolia, *Hook.* New Zealand.

H. repens, *Presl.* Tropical America.

H. tenuifolia, *Bernh.* Polynesia, &c.

Isoloma. See *Lindsaya*.



Lastrea. See *Nephrodium*.

L. aristata, Hort. See *Aspidium aristatum*.

Lecanopteris, Bl.

L. carnosa, Bl. Malaya.

Lepicystis. See *Polypodium*.

Leptochilus. See *Acrostichum*.

Leptogramme. See *Gymnogramme*.

Leptopteris. See *Todea*.

Leucostegia. See *Davallia*.

Lindsaya, Dry.

L. davallioides, Bl. Malaya.

L. ensifolia, Sw. Old World Tropics.

L. flabellulata, Dry. Tropical Asia.

L. heterophylla, Dry. Tropical Asia.

L. Lowii. See *Acrostichum sorbifolium*.

L. reniformis, Dry. Guiana.

L. retusa, Mett. Philippines, &c.

Litobrochia. See *Pteris*.

Lomaria, Willd.

L. alpina, Spreng. South temperate zone.

L. attenuata, Willd. Tropical and south temperate regions.

Var. *gigantea* (Kaulf.). South Africa.

Var. *heterophylla* (Hort.).

L. Banksii, Hook. fil. New Zealand.

L. boryana, Willd. Tropical and south temperate regions.

Var. *cycadæfolia* (Colla). Chili.

L. capensis, Willd. See *procera*.

Lomaria, Willd.—cont.

- L. ciliata*, Moore. New Caledonia.
- L. crenulata*, Moore. See *Germainii*.
- L. discolor*, Willd. Australia and New Zealand.
 Var. *bipinnatifida*, Hort.
 Var. *falcata* (Spreng).
 Var. *nuda* (R. Br.).
- L. fluviatilis*, Spreng. Australia and New Zealand.
- L. Germainii*, Hook. Chili.
- L. gibba*, Lab. New Caledonia, &c.
 Var. *tincta*, Hort.
- L. gigantea*, Kaulf. See *attenuata*.
- L. Gilliesii*, Hook. & Grev. See *procera*.
- L. heterophylla*, Hort. See *attenuata*.
- L. lanceolata*, Spr. Australia.
- L. L'Herminieri*, Bory. Tropical America.
- L. magellanica*, Desv. See *boryana*.
- L. membranacea*, Col. New Zealand.
- L. minor*, R. Br. See *procera*.
- L. neo-caledonica*, Hort. See *gibba*.
- L. nigra*, Col. New Zealand.
- L. Patersoni*, Spreng. Australia.
 Var. *elongata* (Bl.).
- L. procera*, Spreng. Australia, &c.
- L. pumila*, Raoul. New Zealand.
- L. punctulata*, Kze. South Africa.
- L.* Spicant*, Desv. North temperate zone.

* For garden varieties, see p. 169.

Lomaria, Willd.—cont.

L. tuberculata, J. Sm. *See* *procera*.

L. zamifolia, Hort. *See* *boryana*.

Lomariopsis. *See* *Acrostichum*.

L. buxifolium, Fee. *See* *A. sorbifolium*, var. *buxifolium*.

Lonchitis, L.

L. pubescens, Willd. Tropics.

Lopholepis. *See* *Polypodium*.

Lophosoria. *See* *Alsophila*.

Lorinseria. *See* *Woodwardia*.

Lotzea. *See* *Asplenium*.

Lygodietycn. *See* *Lygodium*.

Lygodium, Sw.

L. circinatum, Sw. *See* *dichotomum*.

L. dichotomum, Sw. Tropical Asia.

L. flexuosum, J. Sm. *See* *dichotomum*.

L. Forsteri, J. Sm. *See* *reticulatum*.

L. japonicum, Sw. Tropics, &c., Old World.

L. lanceolatum, Desv. Madagascar.

L. palmatum, Sw. United States.

L. pinnatifidum, Sw. Tropics, &c., Old World.

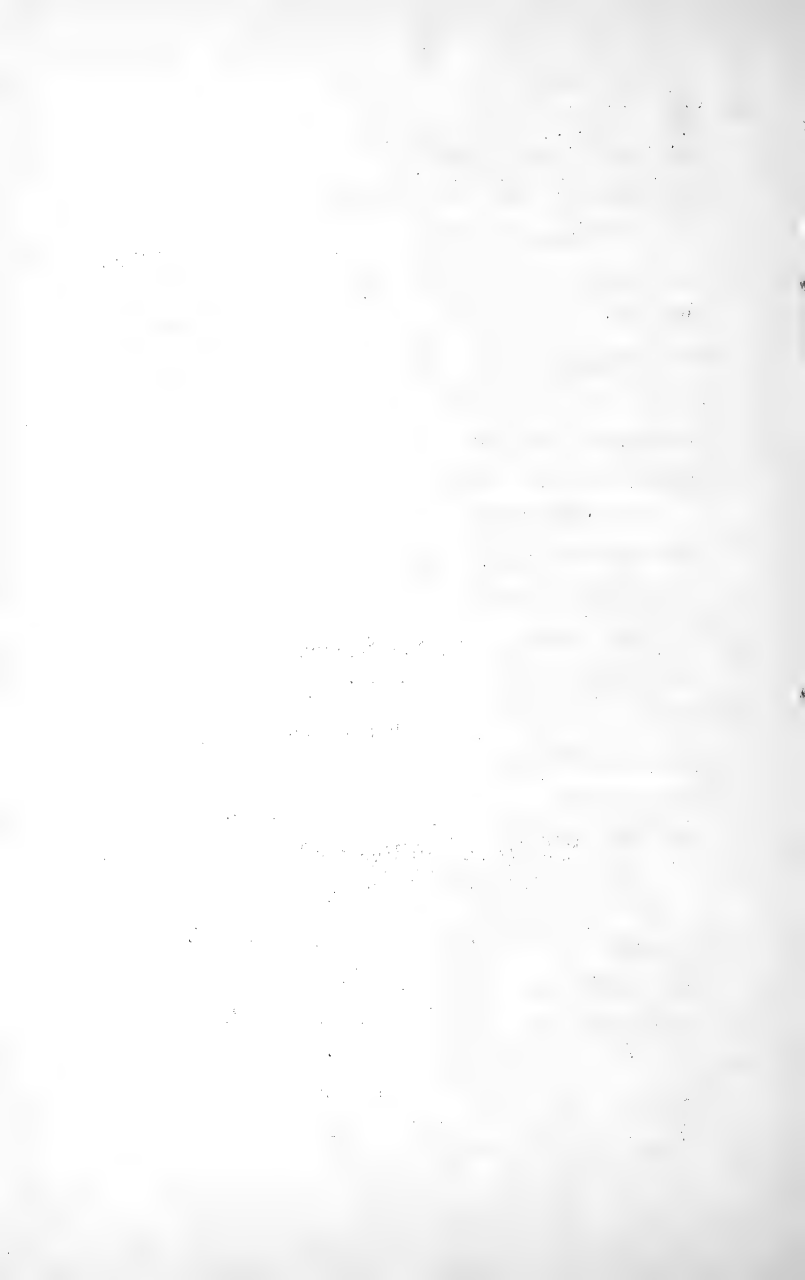
L. reticulatum, Schk. Polynesia.

L. scandens, Sw. Tropics, &c., Old World.

Var. *microphyllum* (R. Br.).

L. venustum, Sw. West Indies, &c.

L. volubile, Sw. South America.



Marattia, Smith.**M. alata**, *J. Sm.* West Indies.**M. attenuata**, *Lab.* New Caledonia.Var. **Moorei** (*Hort.*).*M. Ascensionis*, *J. Sm.* See *fraxinea*, var. *purpurascens*.*M. cristata*, *J. Sm.* See *fraxinea*, var. *purpurascens*.**M. cicutæfolia**, *Kaulf.* Brazil.*M. Cooperi*, *Hort.* See *attenuata*.*M. elegans*, *Endl.* See *fraxinea*.**M. fraxinea**, *Sm.* Tropics, &c., Old World.Var. **purpurascens** (*De Vriese.*). Ascension Island.**M. Kaulfussii**, *J. Sm.* Tropical America.**M. laxa**, *Kze.* Mexico.*M. Moorei*, *Hort.* See *attenuata*.*M. sorbifolia*, *Bory.* See *fraxinea*.**Meniscium, Schreb.****M. angustifolium**, *Willd.* West Indies, &c.*M. deltigerum.* See *Acrostichum virens*.**M. reticulatum**, *Sw.* Tropical America.Var. **macrophyllum** (*Kze.*).Var. **oligophyllum**, *Hort.***M. serratum**, *Cav.* Tropical America.**M. simplex**, *Hook.* Tropical and sub-tropical Asia.**Mertensia.** See *Gleichenia*.**Mesochlæna.** See *Didymochlæna*.**Microlepia.** See *Davallia*.**Microsorium.** See *Polypodium*.

1. The first part of the paper is devoted to a general discussion of the problem of the existence of solutions of the system of equations

$$\frac{dx}{dt} = A(x)u, \quad \frac{dy}{dt} = B(y)v,$$

where $A(x)$ and $B(y)$ are matrices depending on x and y respectively, and u and v are vectors.

2. In the second part, we consider the case where the matrices $A(x)$ and $B(y)$ are constant, and the vectors u and v are functions of x and y respectively. We show that in this case the system of equations can be reduced to a system of ordinary differential equations.

$$\frac{dx}{dt} = A_1(x)u_1, \quad \frac{dy}{dt} = B_1(y)v_1,$$

where $A_1(x)$ and $B_1(y)$ are constant matrices, and u_1 and v_1 are functions of x and y respectively.

3. In the third part, we consider the case where the matrices $A(x)$ and $B(y)$ are constant, and the vectors u and v are constant. We show that in this case the system of equations can be reduced to a system of linear ordinary differential equations.

$$\frac{dx}{dt} = A_2(x)u_2, \quad \frac{dy}{dt} = B_2(y)v_2,$$

where $A_2(x)$ and $B_2(y)$ are constant matrices, and u_2 and v_2 are constant vectors.

4. In the fourth part, we consider the case where the matrices $A(x)$ and $B(y)$ are constant, and the vectors u and v are functions of x and y respectively, and the system of equations is linear.

$$\frac{dx}{dt} = A_3(x)u_3, \quad \frac{dy}{dt} = B_3(y)v_3,$$

where $A_3(x)$ and $B_3(y)$ are constant matrices, and u_3 and v_3 are functions of x and y respectively.

Mohria, Sw.

M. caffrorum, Desv. South Africa.

Var. *achilleæfolia, Hort.*

M. thurifraga. See *caffrorum*.

Monogramme, Sch.

M. seminuda, Baker. West Indies, &c.

Myriopteris. See *Cheilanthes*.

Neottopteris. See *Asplenium*.

Nephrodium, Rich.

N. æmulum, Baker. Britain and Madeira.

N. affine, Lowe. See *Filix-mas*.

N. albopunctatum, Desv. Guinea, Natal, &c.

N. atratum (Wall.). See *hirtipes*.

N. atrovirens (J. Sm.). See *decompositum*.

N. Blumei, Hook. See *intermedium*.

N. boryanum, Baker. Himalaya.

N. calcaratum, Hook. East Indies.

N. canum, Baker. Himalaya.

N. catopterum, Hook. South Africa.

N. chinense, Baker. China and Japan.

N. chrysolobum, Fée. Brazil and Colombia.

N. cicutarium, Baker. Tropics, ubiquitous.

N. confluens, F. Muell. Queensland.

N. coruscum, Hort. See *Aspidium varium*.

N. cristatum, Mich. Europe and North America.

Var. *uliginosum, Newm.*

N. cuspidatum, Baker. West Indies and Ceylon.

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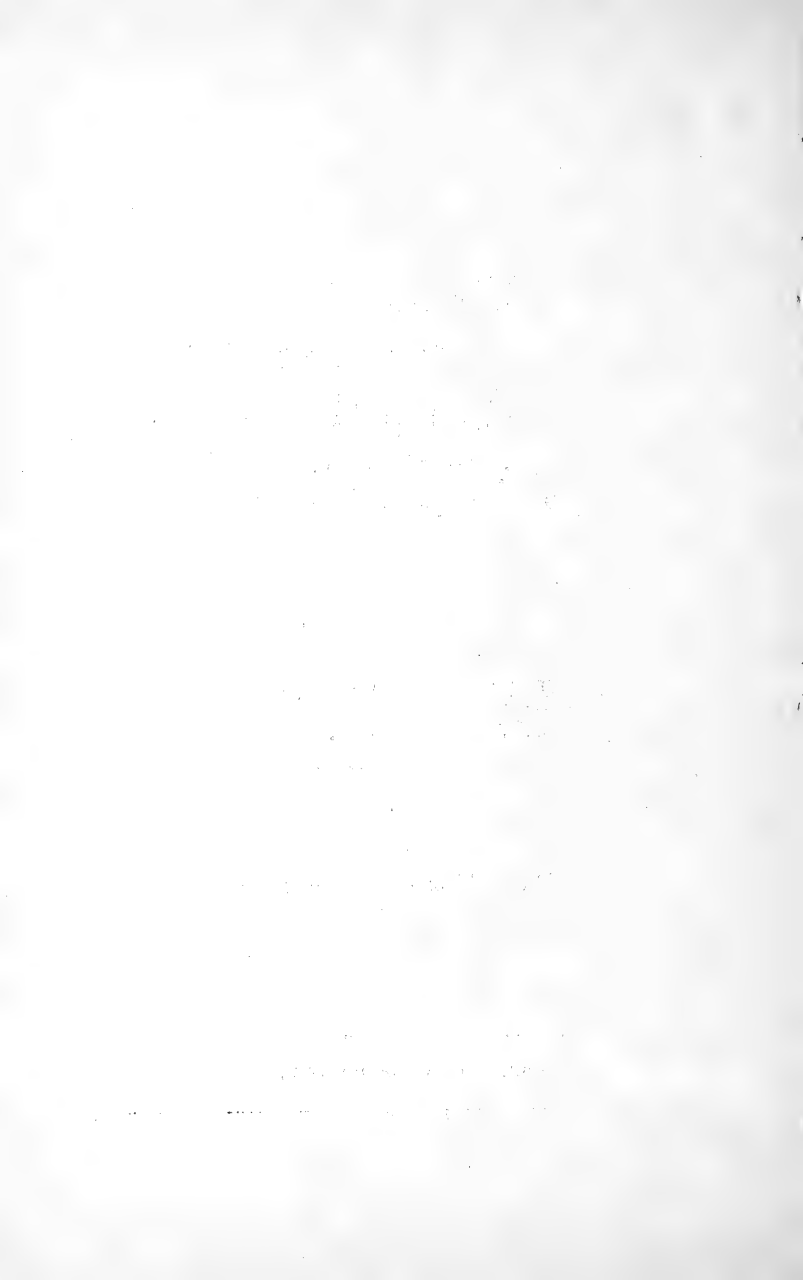
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Nephrodium, Rich.—cont.

- N. cyatheoides, Kaulf.** Tropical Asia.
- N. decompositum, R. Br.** Australia and New Zealand.
 Var. *glabellum* (Cunn.).
 Var. *Shepherdii* (Kze.).
- N. decurrens, Baker.** Tropical Asia.
- N. decursivo-pinnatum, Baker.** China and Japan.
- N. deltoideum, Desv.** Tropical America.
- N. denticulatum, Hook.** Tropical America.
- N. dilatatum, Desv.* See *spinulosum*.
- N. dissectum, Desv.** Tropics of Old World.
 Var. *membranifolium* (Presl.).
- N. divergens, Willd.** See *effusum*.
- N. effusum, Baker.** Tropical America.
 Var. *divergens* (Willd.).
- N. elongatum, H. & G.* See *Filix-mas*.
- N. eriocarpum, D.C.* See *odoratum*.
- N. erythrosorum, Hook.** Japan.
 Var. *prolificum* (Maxim.).
- N. extensum, Hook.** Ceylon.
- N.* Filix-mas, Desv.** Temperate regions, ubiquitous.
 Var. *elongatum* (Hook. & Gr.). Sub-tropical regions.
 Var. *schimperianum* (Hochst.). Simla.
- N. floridanum, Hook.** Louisiana and Florida.
- N. Fœnisecii, Lowe.* See *æmulum*.
- N. glabellum, Cunn.* See *decompositum*.

* For garden varieties, see p. 171.



Nephrodium, Rich.—cont.

- N. goldieanum, Hook.** North America.
N. Grisebachii, Baker. Cuba.
N. hirtipes, Hook. Tropical Asia.
N. hispidum, Hook. New Zealand.
N. incisum, Baker. West Indies.
N. intermedium, Baker. Tropical Asia.
N. irregulare, Brack. *See* latifolium.
N. Jenmani, Baker. Jamaica.
N. lacerum, Baker. Japan.
N. latifolium, Baker. Polynesia.
N. lepidum, Moore. Polynesia.
N. leuzeanum, Hook. Tropical Asia.
N. macrophyllum, Baker. Tropical America.
 Var. calvatum, Hort.
N. marginale, Michx. North America.
N. membranifolium, Presl. *See* dissectum.
N. molle, Desv. Ubiquitous.
 Var. polydactylon, Hort. Tropics.
 Var. violascens, Link.
N. montanum, Baker. Europe.
N. nevadense, Baker. North America.
N. noveboracense, Desv. North America.
N. odoratum, Baker. Tropical Asia, &c.
N. Oreopteris, Desv. *See* montanum.
N. patens, Desv. Tropics, &c.
N. polymorphum, Baker. Tropical Asia.

REIGN OF KING CHARLES THE FIRST

IN THE YEAR 1649

BY JOHN BURNET

OF THE UNIVERSITY OF OXFORD

IN TWO VOLUMES

LONDON, Printed by J. Streater, at the

Sign of the Gun, in St. Dunstons Church-yard

1692

By Authority

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Printed by J. Streater, at the

Nephrodium, Rich.—cont.

N. prolificum, Maxim. See erythrosorum.

N. pubescens, Desv. West Indies.

N. recedens, Hook. Ceylon, &c.

N. recurvum, Hort. See æmulum.

N. Richardsi, Baker. New Caledonia.

Var. *multifidum*, Hort.

N. rigidum, Desv. North temp. zone.

Var. *argutum* (Kaulf.).

N. rodigasianum, Morr. Samoa.

N. scabrosum, Baker. Nilgherries.

N. setigerum, Baker. Japan and tropical Asia.

Var. *cristatum*, Hort.

N. setosum, Baker. Java.

N. Sieboldii, Hook. Japan.

N. Sloanei, Baker. Tropical America.

N. sparsum, Don. Tropical Asia.

N. spinulosum*, Desv. North temp. zone.

Var. *dilatatum* (Desv.).

N. subtriphyllum, Baker. Tropical Asia.

N. tenericaule, Hook. See setigerum.

N. Thelypteris, Desv. North and South temp. zones.

N. Thwaitesii, Baker. Ceylon.

N. Trimeni, Beddome. Ceylon.

N. truncatum, Presl. East Indies, &c.

N. unitum, R. Br. Tropical and sub-tropical regions.

* For garden varieties, see p. 175.



Nephrodium, Rich.--cont.

N. varians, Fée. Trinidad.

N. variolosum, Baker. Malaya.

N. villosum, Presl. Tropical America.

Var. *lachnopodium* (J. Sm.).

Nephrolepis, Schott.

N. acuta, Presl. Tropics everywhere.

N. Bausei, Hort. Garden origin.

N. biserrata, Schott. See *acuta*.

N. cordifolia, Baker. Tropics everywhere.

Var. *compacta*, Hort.

Var. *pectinata* (Schott).

Var. *philippensis* (Hort.).

Var. *tuberosa* (Presl.).

N. davallioides, Kze. Java.

Var. *furcans*, Hort.

N. Duffi, Moore. Australia.

N. ensifolia, Presl. See *acuta*.

N. exaltata, Schott. Tropics everywhere.

Var. *Barteri*, Hort. West Tropical Africa.

Var. *hirsutula*, Presl.

N. pectinata, Schott. See *cordifolia*.

N. philippinensis, Hort. See *cordifolia*.

N. Pluma, Moore. Madagascar.

N. ramosa, Moore. Tropics, Old World.

N. recurvata, Hort. See *exaltata*.

N. rufescens, Presl. Tropics.

Var. *tripinnatifida*, Baker. Solomon Islands.

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Nephrolepis, Schott.—cont.

N. tuberosa, Presl. *See* cordifolia.

N. undulata, J. Sm. *See* cordifolia.

Neurocallis. *See* Acrostichum.

Niphobolus. *See* Polypodium.

N. rupestris, Spr. *See* Polypodium serpens.

Niphopsis. *See* Polypodium.

Nothochlæna, R. Br.

N. affinis, Hook. Mexico, &c.

N. eckloniana, Kze. South Africa.

N. ferruginea, Hook. South America and West Indies.

N. flavens, Moore. Tropical America.

N. Hookeri, Lowe. *See* nivea.

N. lævis, M. & G. *See* sinuata.

N. lanuginosa, Desv. South Europe, &c.

N. Marantæ, R. Br. South Europe, &c.

N. nivea, Desv. Tropical America.

N. rufa, Presl. *See* ferruginea.

N. sinuata, Kaulf. Tropical America.

N. sulphurea, J. Sm. California, Mexico, &c.

N. trichomanoides, R. Br. Jamaica, Cuba.

Odontosoria. *See* Davallia.

Oleandra, Cav.

O. articulata, Cav. Tropical Africa.

O. nodosa, Presl. Tropical America.

Olfersia. *See* Acrostichum.

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Onoclea, L.

O. germanica, Willd. Europe and North America.

O. pennsylvanica, Willd. See *germanica*.

O. sensibilis, L. North America.

Onychium, Kaulf.

O. auratum, Kaulf. Himalaya.

O. japonicum, Kze. Japan and Himalaya.

Var. *multisectum*, Henders.

O. lucidum, Spr. See *japonicum*.

Ophioglossum, L.

O. pendulum, L. Tropics, Old World.

O. vulgatum, L. Ubiquitous.

Osmunda, L.

O. cinnamomea, L. North America, &c.

O. claytoniana, L. North America, &c.

O. interrupta, Mich. See *claytoniana*.

O. japonica, Thunb. See *regalis*.

O. javanica, Bl. Java, &c.

O. regalis, L. North and South temp. regions.

Var. *corymbifera*, Hort.

Var. *cristata*, Hort.

Var. *japonica* (*Thunb.*). Japan, &c.

Var. *palustris*, Hort.

Var. *purpurascens*, Hort.

O. spectabilis, Willd. See *regalis*.

Paragramma. See *Polypodium*.

Pellaea, Link.

P. adiantifolia, Hort. See *hastata*.

Pellæa, *Link.*—*cont.*

- P. alabamensis*, *Baker.* Alabama.
P. andromedæfolia, *Fée.* California and South Africa.
P. atropurpurea, *Link.* North America.
P. brachyptera, *Baker.* California.
P. cordata, *J. Sm.* Mexico.

Var. *flexuosa* (*Link.*).

- P. densa*, *Hook.* North America.
P. falcata, *Fée.* Tropical Asia and Australia.
P. geraniæfolia, *Fée.* Tropics.
P. gracilis, *Hook.* North temp. zone.
P. hastata, *Link.* South Africa.
P. intramarginalis, *J. Sm.* Mexico.
P. involuta, *Baker.* East Africa.
P. mucronata, *Eaton.* California, &c.
P. paradoxa, *Hook.* Australia.
P. ternifolia, *Fée.* Tropical America.
P. wrightiana, *Hook.* See *mucronata*.

Phegopteris. See *Polypodium.*

- P. lachnopoda*, *J. Sm.* See *Nephrodium amplum.*
P. submarginalis, *J. Sm.* See *N. caripense.*
P. trichodes, *J. Sm.* See *N. setigerum.*

Phlebodium. See *Polypodium.**Phymatodes.* See *Polypodium.*

- P. vulgare*, *Presl.* See *Polypodium Phymatodes.*

Platycerium, *Desv.*

- P. æthiopicum*, *Hook.* Tropical Africa.

Platycerium, Desv.—cont.

P. alaicorne, Desv. Australia.

Var. **Hillii (Moore).**

P. grande, J. Sm. Tropical Asia and North Australia.

P. Stemmaria, Beauv. See *æthiopicum*.

P. Wallickii, Hook. Malaya.

P. Willinckii, Moore. Java.

Platyloma. See *Pellæa*.

Pleocnemia. See *Nephrodium*.

Pleopeltis. See *Polypodium*.

Pleuridium. See *Polypodium*.

Pœcilopteris. See *Acrostichum*.

Polybotrya. See *Acrostichum*.

Polypodium, L.

P. adnascens, Sw. Tropical Asia.

Var. **lævis (J. Sm.).**

P. adnatum, Kze. South America.

P. albopunctatissimum, Linden. See *crassifolium*.

P. albosquamatum, Bl. Malaya.

P. alpestre, Hoppe. North temp. zone.

Var. **flexile (Newm.).** Scotland.

P. amœnum, Wall. North India.

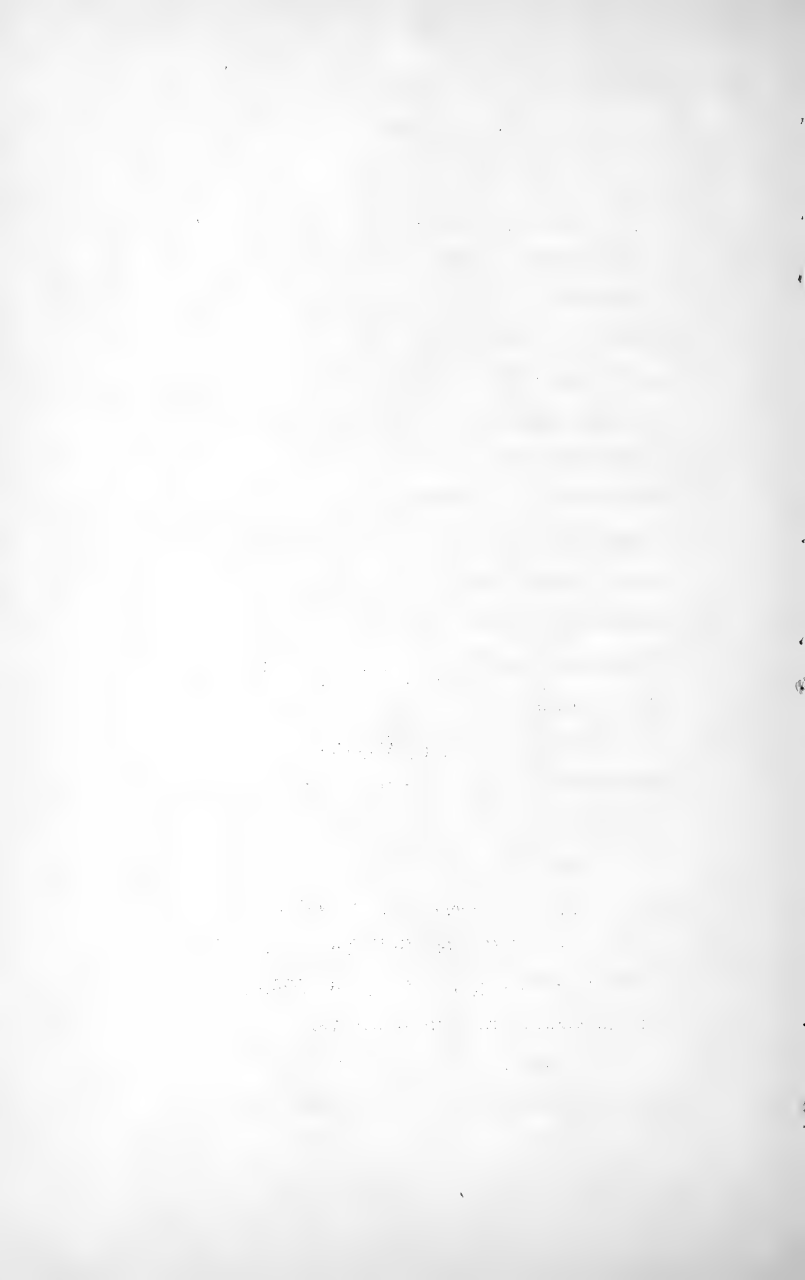
P. amphostemon, Kze. See *angustifolium*.

P. angustatum, Sw. Tropical Asia.

P. angustifolium, Sw. Tropical America.

P. appendiculatum, Wall. East Himalaya.

P. areolatum, H. B. K. See *aureum*.



Polypodium, L.—cont.

P. aureum, L. Tropical America.

Var. *areolatum* (H. B. K.).

Var. *glaucum*, Hort.

Var. *pulvinatum* (Link).

Var. *sporodocarpon* (Willd.).

P. Billardieri, R. Br. Australia and New Zealand.

P. biseriale, Baker. Peru, &c.

P. calcareum, Sm. See *Dryopteris*.

P. californicum, Kaulf. California.

P. calvatum, Baker. China.

P. cambricum, L. See *vulgare*.

P. cameroonianum, Hook. Cameroon Mountains.

P. Catherinæ, J. Sm. See *loriceum*.

P. caudiceps, Moore. Formosa.

P. chnoodes, Spreng. Tropical America.

P. clathratum, C. B. Clarke. Simla.

P. colpodes, Kze. See *plesiosorum*.

P. conjugatum, Lam. Tropical Asia.

P. contiguum, Wall. See *longifolium*.

P. coronans, Wall. See *conjugatum*.

P. crassifolium, L. Tropical America.

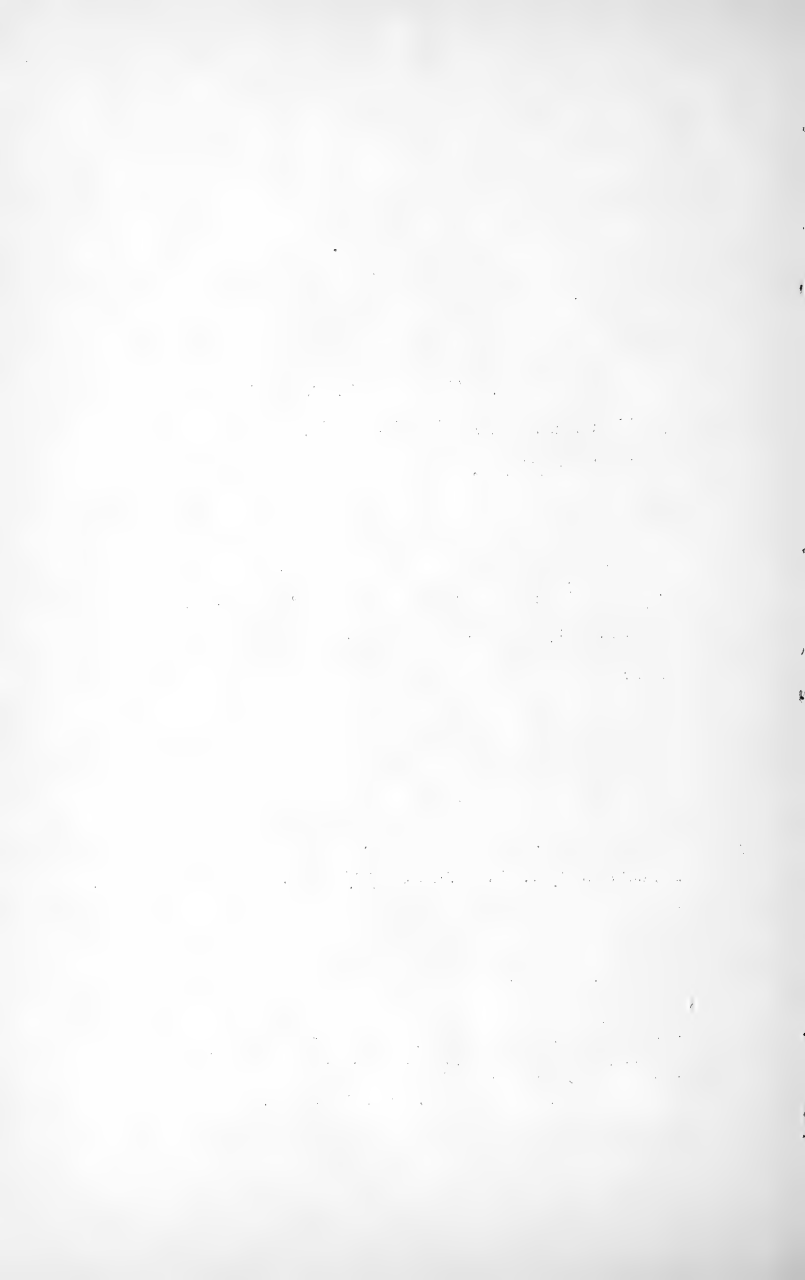
Var. *albopunctatissimum* (Linden). Brazil.

P. cuspidatum, Bl. See *persicæfolium*.

P. dissimile, Hook. See *chnoodes*.

P. distans, Raddi. See *diversifolium*.

P. diversifolium, Sw. Tropical America.



Polypodium, L.—cont.

- P. drepanum*, *Hook.* Madeira.
- P. Dryopteris*, *L.* North temp. zone.
 Var. robertianum (*Hoffm.*).
- P. effusum.* *See* *Nephrodium.*
- P. ensifolium*, *Willd.* *See* *angustifolium.*
- P. elasticum*, *Rich.* Tropical America.
- P. frauxinifolium*, *Jacq.* *See* *diversifolium.*
- P. fossum*, *Baker.* Malaya.
- P. Gardneri*, *Mett.* Ceylon.
- P. glaucophyllum*, *Kze.* West Indies.
 Var. glaucum, *Hort.*
 Var. viride, *Hort.*
- P. griseum*, *Liebm.* Mexico and Guatemala.
- P. guatemalense*, *Hook.* Tropical America.
- P. harpeodes*, *Link.* *See* *loriceum.*
- P. hastæfolium*, *Sw.* West Indies.
- P. hastatum*, *Thunb.* Japan, &c.
- P. hemionitideum*, *Wall.* Tropical Asia.
- P. Heracleum*, *Kze.* Tropical Asia.
- P. hexagonopterum*, *Mich.* North America.
- P. hirsutum*, *Sw.* Brazil.
- P. hymenodes*, *Bl.* *See* *superficiale.*
- P. inæquale*, *Moore.* *See* *guatemalense.*
- P. incanum*, *Sw.* South Africa and America.
- P. incurvatum*, *Bl.* Malaya, &c.
- P. intermedium*, *H. & A.* *See* *californicum.*

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Polypodium, L.—cont.

P. irioides, Lam. Tropics and sub-tropics, Old World.

P. juglandifolium, Don. Himalaya.

Var. *tenuicauda* (*Hook.*).

P. karwinskianum, A. Br. See *plebeium*.

P. lachnopus, Wall. N. India.

P. lævigatum, Cuv. Tropical America.

P. lanceolatum, L. Tropics.

P. leiophizon, Wall. Tropical Asia.

P. lepidopteris, Kze. Tropical America.

Var. *sepultum* (*Kaulf.*).

P. Lingua, Sw. Tropical Asia, &c.

Var. *corymbiferum, Hort.*

Var. *Heteractis* (*Mett.*). Himalaya.

P. longissimum, Bl. Tropical Asia.

P. longifolium, Mett. Malaya.

P. loriceum, L. Tropical America.

Var. *pinnatifidum, Baker.*

Var. *vacillans* (*Link.*).

P. lycopodioides, L. Tropics everywhere.

Var. *maximum, Hort.*

Var. *owariense* (*Desv.*). Tropical Africa.

Var. *salicifolium* (*Willd.*). Tropical America.

Var. *squamulosum, Kaulf.* Brazil.

P. macrourum, Baker. Australia.

P. megalodus, Schk. See *tetragonum*.

P. membranaceum, Don. N. India.

P. menisciifolium, L. & F. Brazil,

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Polypodium, L.—cont.

- P. meyenianum*, *Schott.* Philippines.
- P. musæfolium*, *Bl.* Malaya.
- P. multilineatum*, *Wall.* N. India.
- P. neriifolium*, *Schk.* Tropical America.
- P. nigrescens*, *Bl.* Malaya, &c.
- P. nigripes*, *Hook.* Venezuela.
- P. nitidum*, *J. Sm.* See *lycopodioides*.
- P. owariense*, *Desv.* See *lycopodioides*.
- P. pectinatum*, *L.* Tropical America.
 Var. *Paradiseæ* (*L. & F.*).
 Var. *plumosum*, *Hort.*
- P. peltideum*, *Link.* See *Phymatodes*.
- P. pennigerum*, *Forst.* New Zealand.
- P. percussum*, *Cav.* Tropical America.
- P. persicæfolium*, *Desv.* Tropical Asia.
 Var. *grandidens*, *Kze.* Java.
- P. Phegopteris*, *L.* North temp. zone.
 Var. *cristatum*, *Hort.*
- P. Phyllitidis*, *L.* Tropical America.
 Var. *brevifolium* (*Link.*).
 Var. *obscurum* (*Mett.*).
- P. Phymatodes*, *L.* Tropics, Asia and Africa.
 Var. *longipes* (*Link.*).
 Var. *terminale* (*Link.*).
- P. pictum*, *Baker.* Polynesia.
- P. piloselloides*, *L.* Tropical America.
- P. plebeium*, *Schlecht.* Mexico.

Polypodium, L.—cont.

- P. plesiosorum*, *Kze.* Tropical America.
 Var. *appendiculatum* (*Klotzsch*).
P. Plumula, *H. B. K.* See *elasticum*.
P. presliianum, *Link.* See *neriifolium*.
P. propinquum, *Wall.* Tropical Asia.
P. pulvinatum, *Link.* See *aureum*.
P. pustulatum, *Forst.* Australia and New Zealand.
P. quercifolium, *L.* Tropical Asia, &c.
 . *repens*, *L.* Tropical America.
 Var. *undulatum*, *Hort.*
P. reptans, *Sw.* Tropical America.
 Var. *asplenioides*, (*Sw.*).
P. rigidulum, *Sw.* N. Australia, &c.
P. robertianum, *Hoffm.* See *Dryopteris*.
P. rostratum, *Hook.* N. India.
P. rubidum, *Hook.* Philippines.
P. rupestre, *Bl.* Java, &c.
P. Scouleri, *H. & G.* N.W. America.
P. sepultum, *Kaulf.* See *lepidopteris*.
P. serpens, *Forst.* Australia.
P. simplex, *Sw.* See *lineare*.
P. spectrum, *Kaulf.* Sandwich Isles.
P. sphærocephalum, *Wall.* See *angustatum*.
P. sporodocarpon, *Willd.* See *aureum*.
P. squamulosum, *Kaulf.* See *lycopodioides*.
P. stigmaticum, *Presl.* Tropical America.

Received of the Treasurer of the
Board of Directors of the
City of New York the sum of
\$100.00 for the year 1900

Attest: *[Signature]*
Secretary

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Treasurer

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City Clerk

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Mayor

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Comptroller

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Polypodium, *L.*—*cont.*

P. subauriculatum, *Bl.* Tropical Asia &c.

Var. *Reinwardtii* (*Kze.*).

P. subpetiolatum, *Hook.* Central America.

P. superficiale, *Bl.* East Indies.

P. suspensum, *L.* Tropical America.

P. teniosum, *Hort.* See *angustifolium*.

P. tenellum, *Forst.* Australia, &c.

P. tenuicauda, *Hook.* See *juglandifolium*.

P. tetragonum, *Sw.* Australia, &c.

Var. *megalodus* (*Schk.*).

P. tricuspe, *Sw.* Japan.

P. vacillans, *Link.* See *loriceum*.

P. vacciniifolium, *L. and F.* Tropical America.

Var. *album*, *Hort.*

P. venosum, *Desv.* See *stigmaticum*.

P. verrucosum, *Wall.* Malaya.

*P. *vulgare*, *L.* North temp. zone.

P. Xiphias, *Moore.* Polynesia.

P. Zippelii, *Bl.* See *heterocarpum*.

Polystichum. See *Aspidium*.

Prosaptia. See *Davallia*.

Pseudathyrium. See *Polypodium*.

Pteris, L.

P. aquilina, L. Cosmopolitan.

P. arguta, Ait. South Europe and Azores.

* For garden varieties, see p. 175.

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Pteris, L.—cont.

P. argyræa, Moore. See quadriaurita.

P. Bausei. See semipinnata.

P. biaurita, L. Tropics.

Var. *memoralis variegata*.

P. collina, Raddi. See palmata.

P. crassipes, Ag. See gigantea.

P. crenata, Sw. See ensiformis.

P. cretica, L. Tropical and sub-tropical regions.

Var. *albolineata*, Hort.

Var. *cristata*, Hort.

Var. *Mayi*, Hort.

Var. *nobilis*, Hort.

P. elata, Ag. Tropical America.

P. ensiformis, Burm. Tropical Asia.

Var. *Victoriæ*, Hort.

Var. *cristata*, Hort.

P. flabellata, Thunb. South Africa.

P. Ghiesbreghtii, J. Sm. See laciniata.

P. gigantea, Willd. West Indies.

P. glaucovirens, Linden. See quadriaurita.

P. heterophylla, L. West Indies.

Var. *internata* (Moore).

P. incisa, Thunb. Tropical and sub-tropical regions.

P. laciniata, Willd. Tropical America.

Var. *Ghiesbreghtii*, J. Sm.

P. leptophylla, Sw. Brazil.

1. The first part of the paper is devoted to a general discussion of the problem of the existence of solutions of the system of equations

$$\begin{aligned} & \frac{dx}{dt} = f(x, y, z), \\ & \frac{dy}{dt} = g(x, y, z), \\ & \frac{dz}{dt} = h(x, y, z), \end{aligned}$$

where f, g, h are continuous functions of x, y, z and satisfy the conditions

$$\begin{aligned} & f(0, 0, 0) = 0, \\ & g(0, 0, 0) = 0, \\ & h(0, 0, 0) = 0. \end{aligned}$$

The second part of the paper is devoted to a study of the stability of the solutions of the system of equations

$$\begin{aligned} & \frac{dx}{dt} = -x, \\ & \frac{dy}{dt} = -y, \\ & \frac{dz}{dt} = -z. \end{aligned}$$

The third part of the paper is devoted to a study of the stability of the solutions of the system of equations

$$\begin{aligned} & \frac{dx}{dt} = -x, \\ & \frac{dy}{dt} = -y, \\ & \frac{dz}{dt} = -z. \end{aligned}$$

Pteris, *L.*—*cont.*

P. longifolia, *L.* Tropical and sub-tropical regions.

Var. *Mariesii*, *Hort.* Japan.

P. ludens, *Wall.* Tropical Asia.

P. moluccana, *Bl.* Malaya, &c.

P. memorialis, *Willd.* See *biaurita*.

P. nobilis, *Hort.* See *palmata*.

P. Ouvrardii, *Hort.* See *serrulata*.

P. palmata, *Willd.* Tropical America, &c.

Var. *collina* (*Raddi*).

Var. *nobilis*, *Hort.*

P. patens, *Hook.* Tropics of Old World.

P. podophylla, *Sw.* Tropical America, &c.

P. quadriaurita, *Retz.* Tropics.

Var. *argyræa* (*Moore*).

Var. *rubricaulis* (*J. Sm.*).

Var. *tricolor* (*Hort.*).

P. robusta, *Hort.* See *aculeata*.

P. sagittifolia, *Raddi.* Brazil.

P. scaberula, *A. Rich.* New Zealand.

P. semipinnata, *L.* Tropical and sub-tropical Asia.

Var. *Bausei*, *Hort.*

P. serrulata, *L. fil.* China and Japan.

Var. *compacta*, *Hort.*

Var. *cristata*, *Hort.*

Var. *densa*, *Hort.*

Var. *gracilis*, *Hort.*

Var. *gloriosa*, *Hort.*

1. The first part of the paper is devoted to a general discussion of the problem of the existence of solutions of the system of equations

$$\begin{cases} \Delta u = f(x, y, z, u, v, w) \\ \Delta v = g(x, y, z, u, v, w) \\ \Delta w = h(x, y, z, u, v, w) \end{cases}$$

where f, g, h are functions of the variables x, y, z, u, v, w and the Laplacian Δ is defined by the formula

$$\Delta u = \frac{\partial^2 u}{\partial x^2} + \frac{\partial^2 u}{\partial y^2} + \frac{\partial^2 u}{\partial z^2}$$

and the domain of definition of the functions u, v, w is the region R bounded by the surface S . The boundary conditions are assumed to be of the form

$$u = \alpha, \quad v = \beta, \quad w = \gamma$$

on the surface S .

2. In the second part of the paper the author considers the case when the functions f, g, h are linear in the variables u, v, w .

3. In the third part of the paper the author considers the case when the functions f, g, h are quadratic in the variables u, v, w .

4. In the fourth part of the paper the author considers the case when the functions f, g, h are cubic in the variables u, v, w .

5. In the fifth part of the paper the author considers the case when the functions f, g, h are of higher order in the variables u, v, w .

Pteris. *L.*—*cont.*

P. serrulata, *L. fil.* China and Japan—*cont.*

Var. **Leyi**, *Hort.*

Var. **maxima**, *Hort.*

Var. **Ouvrardii**, *Hort.*

Var. **undulata**, *Hort.*

P. straminea, *Mett.* Chili.

P. sulcata, *Link.* See *quadriaurita*.

P. tremula, *R. Br.* Australia.

Var. **elegans**, *Hort.*

Var. **kingiana** (*Endl.*).

Var. **smithiana**, *Hort.*

P. umbrosa, *R. Br.* Australia.

P. undulata, *Moore.* Fiji.

P. Victoriae, *Hort.* See *ensiformis*.

P. wallichiana, *Ag.* Himalaya.

Pteropsis. See *Tænitis*.

Pycnopteris. See *Nephrodium*.

Rhipidopteris. See *Acrostichum*.

Saccoloma. See *Davallia*.

Sadleria, *Kaulf.*

S. cyathæoides, *Kaulf.* Sumatra and Sandwich Islands.

Sagenia. See *Nephrodium*.

Salpichlæna. See *Lomaria*.

Schellelepsis. See *Polypodium*.

Schizocæna. See *Cyathea*.

Schizoloma. See *Lindsaya*.



Scolopendrium, Sm.

S. brasiliense, Kze. Brazil.

S. Krebsii, Kze. See *Lomaria punctulata*.

*S. *vulgare*, Sm. North temperate zone.

Selliguea. See *Gymnogramme*.

Sitolobium. See *Davallia*.

Soromanes. See *Acrostichum Cænopteris*.

Stegania. See *Lomaria*.

Stenochlæna. See *Acrostichum*.

Stenolomana. See *Davallia*.

Stenosemia. See *Acrostichum*.

Struthiopteris. See *Onoclea*.

Taeniopsis. See *Vittaria*.

Thyrsopteris, Kze.

T. elegans, Kze. Juan Fernandez.

Todea, Willd.

T. africana, Willd. See *barbara*.

T. barbara, Moore. South Africa, Australia, and New Zealand.

T. Fraseri, H. & G. Australia, &c.

Var. *wilkesiana* (Brack.). Polynesia.

T. grandipinnula, Moore. See *Moorei*.

T. hymenophylloides, R. & L. New Zealand.

T. Moorei, Baker. Lord Howe's Island.

T. pellucida, Carm. See *hymenophylloides*.

T. rivularis, Sieb. See *barbara*.

* For garden varieties, see p. 179.

Todea, Willd.—cont.

T. superba, Col. New Zealand.

T. wilkesiana, Brack. See *Fraseri*.

Trichomanes, L.

T. alatum, Sw. Tropical America.

Var. *attenuatum* (Hook.).

T. angustatum, Carm. See *tenerum*.

T. apiifolium, Presl. Polynesia, &c.

T. auriculatum, Bl. Tropical Asia, &c.

T. Bancroftii, H. & G. Tropical America.

T. bipunctatum, Poir. See *Filicula*.

T. Bojeri, H. & G. See *cuspidatum*.

T. boschianum, Sturm. See *radicans*.

T. crispum, L. Tropical America.

T. cuspidatum, Willd. Mauritius.

T. elongatum, Cunn. See *rigidum*.

T. exsectum, Kze. Chili, &c.

T. Filicula, Bory. Tropical Asia and Africa.

T. fœniculaceum, Bory. Mauritius, &c.

T. humile, Forst. Polynesia, &c.

T. javanicum, Bl. Malaya.

T. Kaulfussii, Hook. fil. West Indies.

T. luschnathianum, Presl. See *radicans*.

T. maximum, Bl. Malaya and Polynesia.

T. meifolium, Hort. See *apiifolium*.

T. membranaceum, L. Tropical America.

Trichomanes, *L.*—*cont.*

- T. muscoides*, *Sw.* Tropics.
- T. parviflorum*, *Poir.* See *foeniculaceum*.
- T. parvulum*, *Poir.* Tropics of Old World.
- T. Petersii*, *A. Gray.* Alabama.
- T. pinnatum*, *Sw.* Tropical America.
- T. Prieurii*, *Kze.* Tropical America.
- T. pulcherrimum*, *Col.* New Zealand.
- T. pyxidiferum*, *L.* Tropics everywhere.
 Var. olivaceum (*Kze.*). Tropical America.
- T. quercifolium*, *H. & G.* See *pusillum*.
- T. radicans*, *Sw.* Tropical and sub-tropical regions.
 Var. alabamense, *A. Gray.*
 Var. Andrewsii, *Newm.* Ireland.
 Var. boschianum (*Sturm.*).
 Var. crispum, *Hort.*
 Var. dilatatum, *Hort.*
 Var. frondosum (*Fée.*).
 Var. luschnathianum (*Presl.*). Brazil.
- T. reniforme*, *Forst.* New Zealand.
- T. reptans*, *Sw.* Tropical America.
- T. rigidum*, *Sw.* Tropics everywhere.
 Var. elongatum (*Cunn.*). New Zealand.
- T. scandens*, *L.* Central America.
- T. spicatum*, *Hedw.* West Indies.
- T. strictum*, *Menz.* New Zealand.
- T. tenerum*, *Spreng.* Tropical America.
- T. trichoideum*, *Sw.* Tropical America.
- T. venosum*, *R. Br.* Australia.



Vittaria, *Smith*.

V. elongata, *Sw.* Tropics of Old World.

V. lineata, *Sw.* Tropical America.

V. scolopendrina, *Thwaites*. Ceylon, &c.

V. stipitata, *Kze.* Colombia to Peru.

Woodsia, *R. Br.*

W. glabella, *R. Br.* North temperate zone.

W. ilvensis, *R. Br.* North temperate zone.

W. oregana, *Eat.* Rocky Mountains.

W. polystichoides, *Eat.* Japan.

W. scopulina, *Eat.* North America.

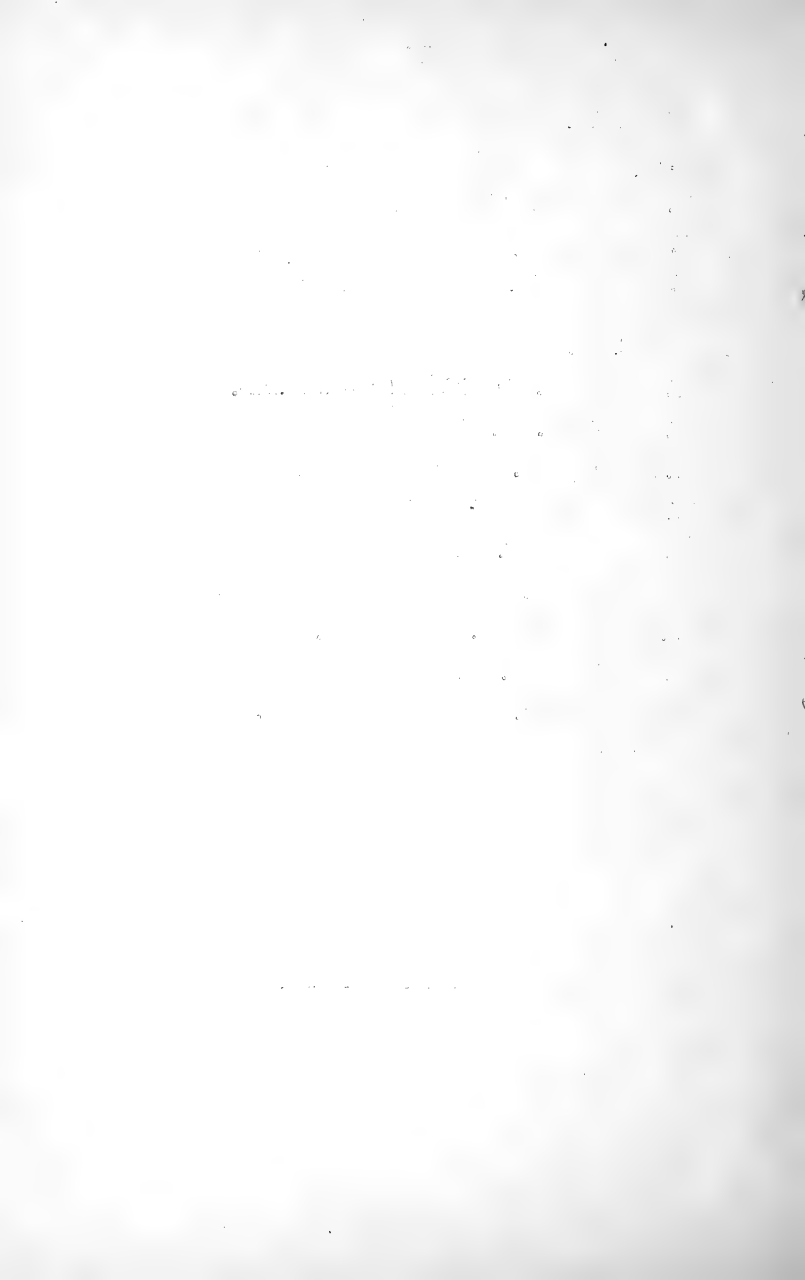
Woodwardia, *Smith*.

W. angustifolia*, *Sm. See *areolata*.

W. orientalis, *Sw.* Japan, &c.

W. radicans, *Sw.* North temperate zone.

Var. ***Brownii*, *Hort.***



II. FERN ALLIES.

Azolla, Lam.

A. caroliniana, Willd. Tropical and sub-tropical America.

A. pinnata, R. Br. Australia.

Equisetum, L.

E. arvense, L. North temperate and arctic regions.

E. fluviatile, Sm. See *limosum*.

E. giganteum, L. Tropical America.

E. hyemale, L. North temperate and arctic regions.

E. limosum, L. North temperate and arctic regions.

E. maximum, Lam. North temperate regions.

E. palustre, L. North temperate and arctic regions.

E. pratense, Ehrh. North temperate and arctic regions.

E. robustum, A. Br. North America.

E. scirpoides, Michx. North temperate and arctic regions.

E. silvaticum, L. North temperate and arctic regions.

E. Telmateia, Ehrh. See *maximum*.

E. variegatum, Schleich. North temperate and arctic regions.

Isoetes, L.

I. Duriæi, Bory. Mediterranean region.

I. lacustris, L. Europe and North America.

Var. *Morei, Moore.* Ireland.

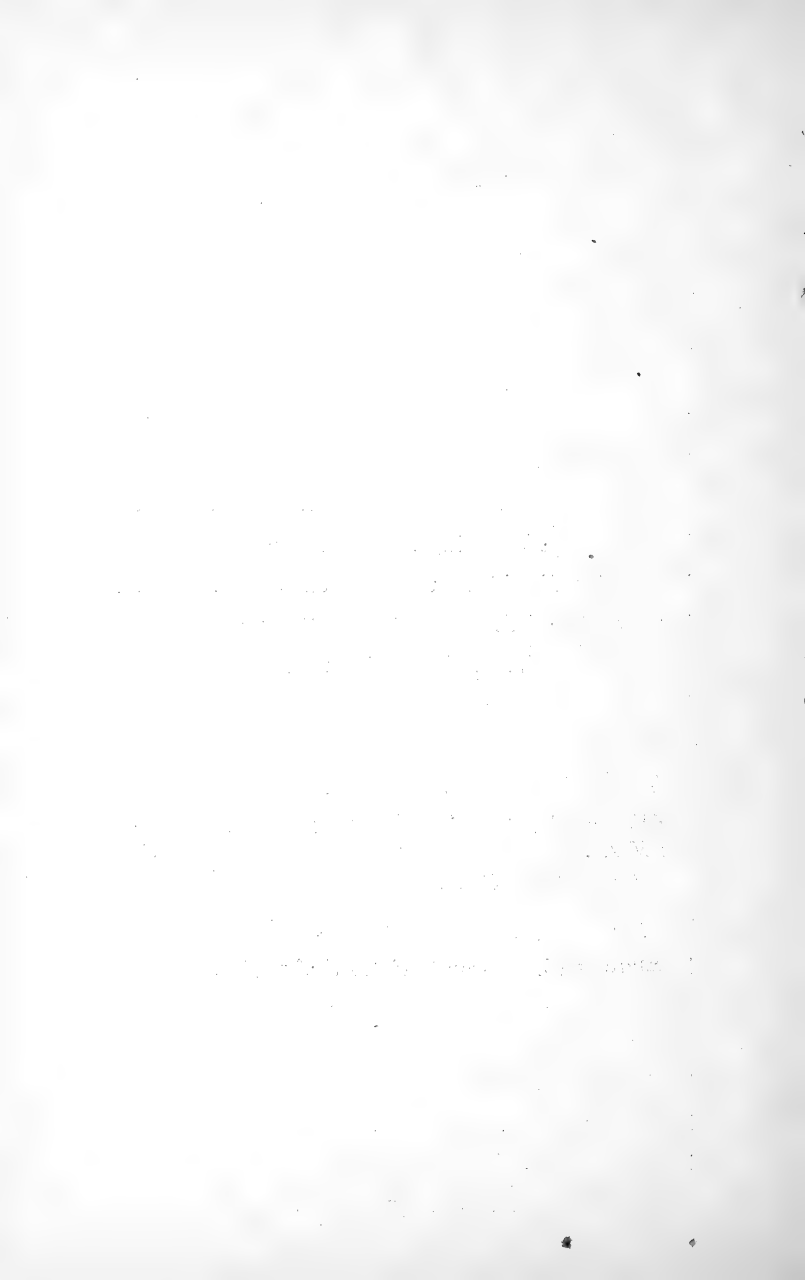
Lycopodium, L.

L. alpinum, L. Europe.

L. complanatum, L. Europe.

L. clavatum, L. Europe.

L. Hippuris, Desv. See *squarrosum*.



Lycopodium, L.—cont.

- L. Hookeri*, Wall. See *squarrosum*.
L. nummularifolium, Bl. Malaya, &c.
L. Phlegmaria, L. Tropics.
L. Selago, L. Europe.
L. squarrosum, Forst. Tropical Asia.
L. strictum, Baker. Madagascar.
L. taxifolium, Sw. Tropical America.

Marsilea, L.

- M. Drummondii*, A. Br. Australia.
 Var. *salvatrix* (Hans.).
M. hirsuta, R. Br. Australia.
M. macropus, Englm. Texas.
M. quadrifoliata, L. Europe and Asia.
M. salvatrix, Hans. See *Drummondii*.

Pilularia, L.

- P. globulifera*, L. Europe.

Psilotum, Sw.

- P. triquetrum*, Sw. Tropics.
 Var. *mascarenica*, Hort.
 Var. *nudum* (Griseb.).

Salvinia, Schreb.

- S. natans*, Hoffm. Sub-tropics of Old World.

Selaginella, Spring.

- S. africana*, A. Br. See *Vogelii*.
S. albonitens, Spring. West Indies.
S. albospica, Hort. See *tenophylla*.
S. amœna, Hort. See *caulescens*.
S. apus, Spring. North America.



Selaginella, Spring—cont.

S. argentea, Spring. *See* caulescens.

S. atroviridis, Spring. Tropical Asia.

S. bakeriana, Bailey. Queensland.

S. Braunii, Baker. China.

S. cæsia, Hort. *See* uncinata.

S. canaliculata, Baker. Tropical Asia.

S. caudata, Spring. *See* canaliculata.

S. caulescens, Spring. Tropical Asia.

Var. *amœna*, Hort.

Var. *minor*, Hort.

S. cognata. *See* Lobbii.

S. concinna, Spring. Mascaren Isles, &c.

S. conferta, Moore. *See* canaliculata.

S. convoluta, Spring. Tropical America.

S. cuspidata, Link. Tropical America.

Var. *elongata*, Spring.

S. denticulata, Link. Europe.

S. denticulata, Hort. *See* kraussiana.

S. dichroa, Hort. *See* Vogelii.

S. Douglasii, Spring. United States.

S. emiliana, Hort.

S. erythropus, Spring. Tropical America.

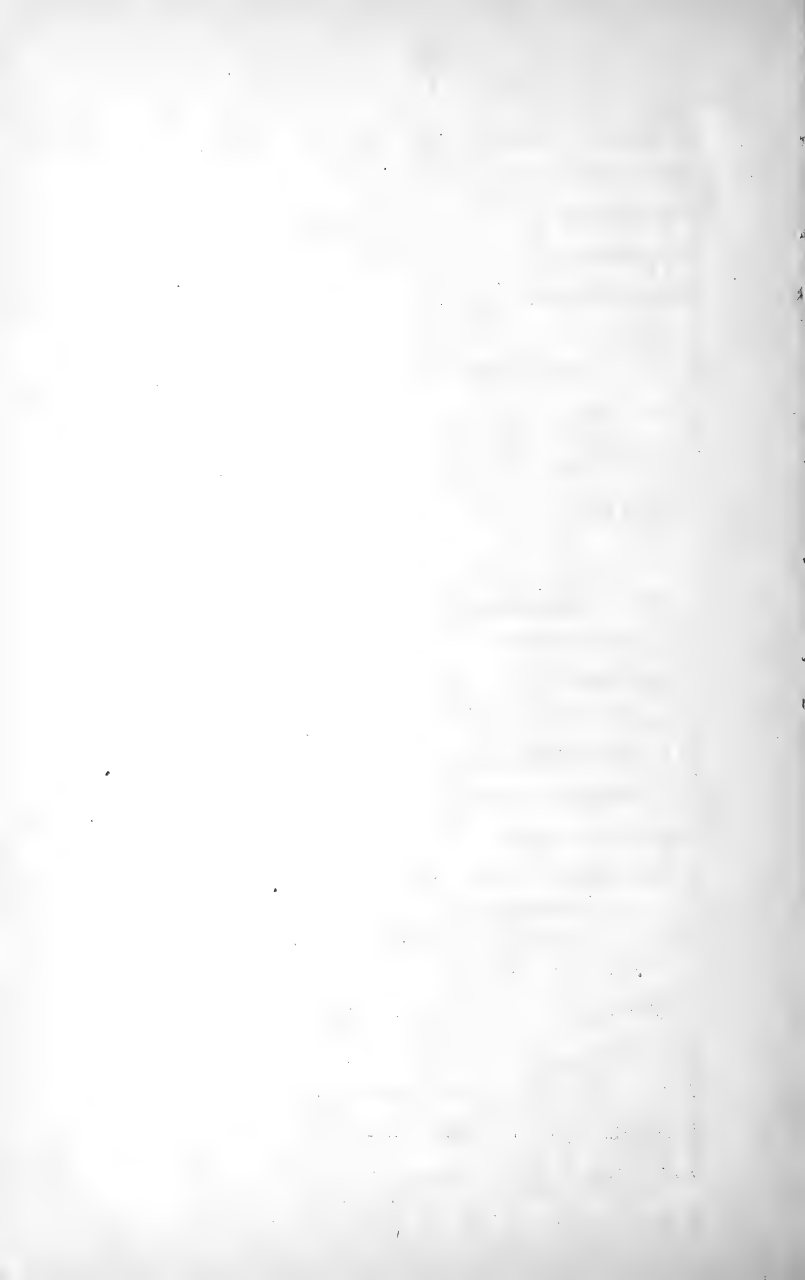
Var. *minor*, Hort.

S. filicina, Spring. *See* hæmatodes.

S. flabellata, Spring. Tropics.

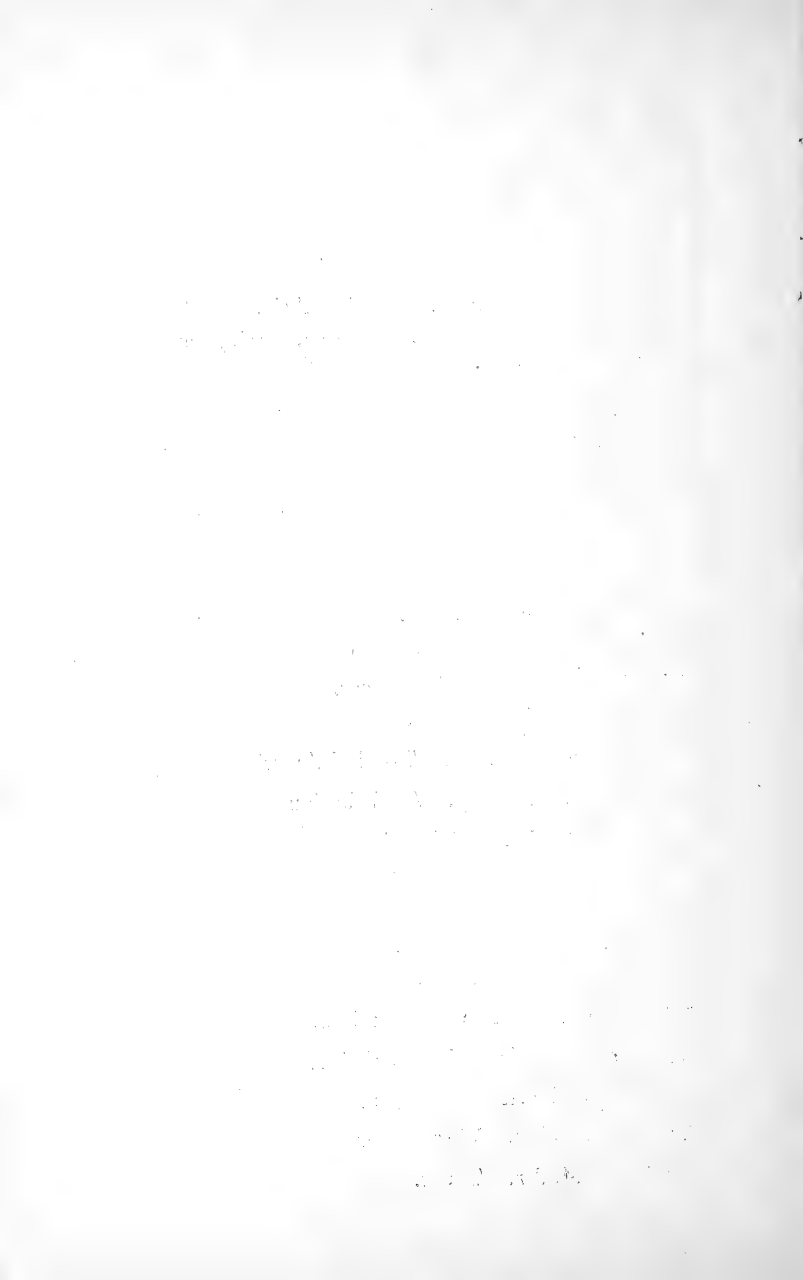
S. flagellifera, Hort. *See* plumosa.

S. flexuosa, Spring. South Brazil.



Selaginella, *Spring*—cont.

- S. Galeottei*, *Spring*. Mexico.
- S. grandis*, *Moore*. Borneo.
- S. Griffithii*, *Spring*. Tropical Asia.
- S. hæmatodes*, *Spring*. Tropical America.
- S. inæqualifolia*, *Spring*. Tropical Asia.
 Var. *bellula* (*Moore*). See var. *perelegans*.
 Var. *perelegans* (*Moore*).
- S. involvens*, *Spring*. China and Japan.
 Var. *texta*, *Baker*.
 Var. *variegata*, *Hort*.
- S. kraussiana*, *A. Br.* South Africa, Azores, &c.
 Var. *aurea*, *Hort*.
 Var. *Brownii*, *Hort*.
 Var. *Stansfieldii*, *Hort*.
 Var. *variegata*, *Hort*.
- S. lævigata*, *Baker*. Madagascar.
 Var. *Lyallii* (*Spring*).
- S. lepidophylla*, *Spring*. Tropical America.
- S. leptostachya*, *Bailey*. See *bakeriana*.
- S. Lyallii*, *Spring*. See *lævigata*.
- S. Martensii*, *Spring*. Mexico.
 Var. *divaricata*, *Hort*.
 Var. *stolonifera*, *A. Br.*
 Var. *variegata*, *Hort*.
- S. Mettenii*, *A. Br.* Garden origin.
- S. molliceps*, *Spring*. Upper Guinea.
- S. mutabilis*, *Hort*. See *serpens*.
- S. patula*, *Spring*. West Indies.
- S. pilifera*, *A. Br.* Texas.



Selaginella, *Spring*—*cont.*

S. plumosa, *Baker*. Tropical Asia.

Var. *flagellifera*, *Hort*.

S. radiata, *Baker*. Tropical America.

S. radicata, *Spring*. See *plumosa*.

S. rubella, *Moore*. Garden origin.

S. rubricaulis, *Hort*. See *suberosa*.

S. serpens, *Spring*. West Indies.

S. stenophylla, *A. Br.* Mexico.

Var. *albospecta*, *Hort*.

S. suberosa, *Spring*. Tropical Asia.

S. texta, *Hort*. See *involuta*.

S. uncinata, *Spring*. China.

S. usta, *Vieill.* New Caledonia.

S. Victoriae, *Moore*. Borneo.

S. viridangula, *Spring*. Polynesia.

S. viticulosa, *Klotzsch*. Tropical America.

S. Vogelii, *Spring*. Tropical Africa.

Var. *dichroa* (*Hort.*).

S. Wallichii, *Spring*. Tropical Asia.

S. Warszewiczii, *Klotzsch*. See *radiata*.

S. Willdenovii, *Baker*. Tropical Asia.

Tmesipteris, *Bernh.*

T. Forsteri, *Endl.* See *tannense*.

T. tannense, *Bernh.* Australia and Polynesia.

III. APPENDIX.

Cultural forms of British Ferns.

Adiantum, L.**A. Capillus-veneris, L.**

- Var. *admirable, Lowe.*
- Var. *concinnum, Hort.*
- Var. *cornubiense, Moore.*
- Var. *daphnites, Lowe.*
- Var. *fissum, Moore.*
- Var. *grande, Moore.*
- Var. *imbricatum, Lowe.*
- Var. *laciniatum, Hort.*
- Var. *magnificum, Fraser.*
- Var. *Mariesii, Moore.*
- Var. *maximum, Moore.*
- Var. *obrienianum, Birkenhead.*
- Var. *optandrum, Lowe.*
- Var. *perfectum, Padley.*
- Var. *Roperi, Hort.*
- Var. *semilunatum, Lowe.*
- Var. *tenuis, Hort.*
- Var. *undulatum, Moore.*

Aspidium, Swartz (Polystichum).**A. aculeatum, Sw. Europe.**

- Var. *acrocladon, Lowe.*
- Var. *Barnesii, Jones.*

Aspidium, Swartz (Polystichum)—cont.**A. aculeatum, Sw. Europe—cont.**Var. *Braunii*, *Hort.*Var. *capitatum*, *Jones.*Var. *cristatum*, *Moore.*Var. *cruciatum*, *Jones.*Var. „ *polydactylon.*Var. *dubium*, *Woll.*Var. *grandiceps*, *Jones.*Var. *Kitsonae*, *Jones.*Var. *meritum*, *Lowe.*Var. *multifidum*, *Woll.*Var. *proliferum*, *Woll.*Var. *pulcherrimum*, *Jones.*Var. *subcristatum*, *Jones.***A. angulare,* Willd. Europe.**Var. *acuto-dissectum*, *Carbonell.*Var. *acuto-divaricatum*, *Carbonell.*Var. *acuto-divisilobum*, *Carbonell.*Var. *acutilobum*, *Woll.*Var. „ *acutum*, *Lowe.*Var. „ *proliferum*, *Moore.*Var. *alatum*, *Moore.*Var. „ *pterophorum*, *Moore.*Var. *apuaeforme*, *Moore.*Var. *assimile*, *Jones.*Var. *athyroides*, *Woll.*Var. *Bayliae*, *Lyell.*Var. *brachiatum*, *Moore.*Var. „ *cristatum*, *Jarvis.*

* This is a sub-species of *A. aculeatum*, but for garden purposes it is more convenient to treat it as a species.

Aspidium, Swartz (Polystichum)—cont.**A. angulare, Willd. Europe—cont.**

Var. *Buckleae*, *Lowe*.

Var. *calomelanos*, *Jones*.

Var. *capitatum*, *Clap*.

Var. *caudatum*, *Carbonell*.

Var. *Claphami*, *Jones*.

Var. *concinnum*, *Moore*.

Var. *confluens*, *Moore*.

Var. *congestum*, *Moore*.

Var. *conspicuilobum*, *Lowe*.

Var. „ *acutum*, *Carbonell*.

Var. *cristatum*, *Moore*.

Var. „ *biceps*, *Carbonell*.

Var. „ *gracile*, *Woll*.

Var. *cruciato-polydactylum*, *Jones*.

Var. *cruciatum*, *Lowe*.

Var. „ *majus*, *Jones*.

Var. „ *proliferum*, *Hort*.

Var. *curvato-pinnum*, *Carbonell*.

Var. *decompositum*, *Moore*.

Var. „ *densum*, *Carbonell*.

Var. „ *grande*, *Jones*.

Var. „ *grandiceps*, *Jones*.

Var. „ *plumosum*, *Jones*.

Var. „ *polydactylum*, *Jones*.

Var. „ *robustum*, *Jones*.

Var. „ *splendens*, *Jones*.

Var. *decurrens*, *Moore*.

Var. *densum*, *Moore*.

Var. „ *polydactylum*, *Jones*.

Var. *divisilobum*, *Woll*.

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Aspidium, *Swartz* (*Polystichum*)—*cont.**A. angulare*, *Willd.* Europe—*cont.*

Var. *divisilobum acutum*, *Jones*.

Var. „ *cristatum*, *Ivery*.

Var. „ *decorum*, *Jones*.

Var. „ *deltoideum*, *Jones*.

Var. „ *densum*, *Carbonell*.

Var. „ *elegans*, *Jones*.

Var. „ *foliosum*, *Jones*.

Var. „ *grandiceps*, *Jones*.

Var. „ *laxum*, *Jones*.

Var. „ *lineare*, *Jones*.

Var. „ *multifidum*, *Jones*.

Var. „ *polydactylum*, *Jones*.

Var. „ *proliferum*, *Woll*.

Var. „ *reflexum*, *Jones*.

Var. „ *robustum*, *Jones*.

Var. „ *splendidissimum*, *Jones*.

Var. *flexuosum*, *Woll*.

Var. „ *polydactylum*, *Jones*.

Var. *folioso-decompositum*, *Jones*.

Var. *foliosum*, *Woll*.

Var. „ *bulbiferum*, *Lowe*.

Var. *frondosum*, *Jones*.

Var. „ *decompositum*, *Jones*.

Var. „ *polydactylum*, *Jones*.

Var. *gracile*, *Woll*.

Var. *grandiceps*, *Moore*.

Var. *grandidens*, *Jones*.

Var. „ *minus*, *Sim*.

Var. „ *truncatum*, *Woll*.

Var. *imbricatum*, *Moore*.

Var. „ *congestum*, *Jones*.

Aspidium, Swartz (Polystichum)—cont.**A. angulare, Willd. Europe—cont.**Var. *inciso-acutum, Jones.*Var. *inciso-laciniatum, Jones.*Var. *incisum, Woll.*Var. „ *variegatum, Woll.*Var. *interruptum, Woll.*Var. *Kitsonae, Moore.*Var. *laciniatum, Woll.*Var. *lanceolatum, Moore.*Var. *latifolium, Woll.*Var. „ *grandiceps, Jones.*Var. *laxo-crispum, Jones.*Var. *lineare, Moore.*Var. „ *minus, Jones.*Var. „ *polydactylum, Jones.*Var. *lineatum, Moly.*Var. *multifidum, Woll.*Var. „ *densum, Jones.*Var. *multilobum, Woll.*Var. „ *deltoideum, Jones.*Var. „ *densum, Jones.*Var. „ *latum, Jones.*Var. „ *laxum, Jones.*Var. „ *multifidum, Jones.*Var. „ *ovale, Woll.*Var. „ *polydactylum, Jones.*Var. „ *revolvens, Jones.*Var. *oxyphyllum, Moore.*Var. *parvissimum, Moore.*Var. *pendens, Jones.*Var. *perserratum, Jones.*



Aspidium, *Swartz* (*Polystichum*)—*cont.**A. angulare*, *Willd.* Europe—*cont.*

Var. *plumosum*, *Woll.*

Var. „ *elegantissimum*, *Jones.*

Var. *polydactylum*, *Moore.*

Var. „ *capitatum*, *Jones.*

Var. „ *cruciatum*, *Lowe.*

Var. „ *grande*, *Jones.*

Var. „ *grandiceps*, *Jones.*

Var. „ *laxum*, *Jones.*

Var. „ *multifidum*, *Jones.*

Var. „ „ *grandiceps*, *Jones.*

Var. „ *robustum*, *Jones.*

Var. *proliferum*, *Moore.*

Var. „ *densum*, *Carbonell.*

Var. „ *holeanum*, *Moore.*

Var. *pulchellum*, *Woll.*

Var. *pulcherrimum*, *Moore.*

Var. *pulchrum*, *Moore.*

Var. *ramo-varians*, *Jones.*

Var. *remoto-decurrens*, *Woll.*

Var. *revolvens*, *Moore.*

Var. *revolvens grandiceps*, *Jones.*

Var. „ *polydactylum*, *Jones.*

Var. *scalptum*, *Carbonell.*

Var. *Stansfieldii*, *Lowe.*

Var. *stipatum*, *Woll.*

Var. *stipitatum*, *Moore.*

Var. *stipulatum*, *Jones.*

Var. *subplumosum*, *Woll.*

Var. *Thompsonae*, *Moore.*

Var. *torto-cristatum*, *Padley.*

1. The first part of the paper is devoted to a general discussion of the problem of the existence of a solution of the system of equations (1) for arbitrary values of the parameters α and β . It is shown that the system has a solution for arbitrary values of the parameters α and β if and only if the condition $\alpha + \beta = 1$ is satisfied. In this case the solution is unique and is given by the formula

$$x = \frac{1}{\alpha + \beta} \left(\alpha x_1 + \beta x_2 \right) \quad (2)$$

where x_1 and x_2 are the solutions of the system of equations (1) for $\alpha = 1$ and $\beta = 0$ and $\alpha = 0$ and $\beta = 1$ respectively.

Aspidium, Swartz (Polystichum)—cont.**A. angulare, Willd. Europe—cont.**Var. tripinnatum, *Moore*.Var. „ acutum, *Moore*.Var. „ densum, *Jones*.Var. „ laciniatum, *Jones*.Var. „ polydactylum, *Jones*.Var. venustum, *Moore*.Var. Widworthyi, *Carbonell*.Var. Wollastoni, *Lowe*.Var. „ majus, *Hort*.**A. Lonchitis, Sw. North temperate zone.****Asplenium, L.****A. Adiantum-nigrum, L. Europe, &c.**Var. acutum, *Pollini*.**A. Ceterach, L. Europe.**Var. major, *O'Kelly*.**A.^s Filix-fœmina, Bernh. Europe.**Var. abasiphyllum, *Lowe*.Var. acrocladon, *Moore*.Var. „ densum, *Stansf*.Var. adpresso-cristatum, *Jones*.Var. angustatum, *Lowe*.Var. apuæforme, *Barnes*.Var. axminsterense, *Lowe*.Var. canaliculatum, *Stansf*.Var. cancellatum, *Sim*.Var. „ cristatum, *Jones*.Var. ceratophyllum, *Mapp*.Var. clarissima, *Jones*.Var. caudiculatum, *Mapp*.

Asplenium, *L.*—*cont.*A. *Filix-fœmina*, *Bernh.* Europe—*cont.*

Var. *congestum-cristatum*, *Stansf.*

Var. *congestum findlayanum*, *Stansf.*

Var. „ *grandiceps*, *Stansf.*

Var. *conoides*, *Appleby.*

Var. „ *cristatum*, *Stansf.*

Var. *cornutum*, *Carbonell.*

Var. *coronatum*, *Lowe.*

Var. *corymbiferum*, *Moore.*

Var. *Craigii*, *Moore.*

Var. „ *angustatum*, *Jones.*

Var. „ *laciniatum*, *Jones.*

Var. *crispato-laciniatum*, *Jones.*

Var. *crispum*, *Moore.*

Var. „ *coronatum*, *Jones.*

Var. „ *cristatum*, *Carbonell.*

Var. *cristatum*, *Woll.*

Var. „ *capitatum*, *Carbonell.*

Var. „ *caudatum*, *Lowe.*

Var. „ *corymbiferum*, *Carbonell.*

Var. „ *defecto-furcillans*, *Mapp.*

Var. „ *densum*, *Carbonell.*

Var. „ *magnificum*, *Lowe.*

Var. „ *reflexum*, *Carbonell.*

Var. *cruciato-capitatum*, *Carbonell.*

Var. „ *-coronatum*, *Carbonell.*

Var. „ *-cristatum*, *Jones.*

Var. „ *-gracile*, *Jones.*

Var. „ *-grandiceps*, *Jones.*

Var. „ *-magnificum*, *Jones.*

Var. „ *-multifidum*, *Stansf.*

*Asplenium, L.—cont.***A. Filix-fœmina, Bernh. Europe—cont.**

Var. *cruciatum*, Jones.

Var. „ *angustum*, Lowe.

Var. *curtum*, Woll.

Var. „ *cristatum*, Stansf.

Var. *daphnites*, Glave.

Var. „ *capitatum*, Glave.

Var. *defecto-gracile*, Mapp.

Var. *diffidum*, Jones.

Var. *diffiso-multifidum*, Moore.

Var. *digitale*, Jones.

Var. „ *capitatum*, Jones.

Var. „ *purpureum*, Jones.

Var. *Elworthii*, Moore.

Var. *Fieldæ*, Moore.

Var. „ *minus*, Jones.

Var. *fissidens*, Moore.

Var. „ *elegans*, Mapp.

Var. *flabellatum*, Jones.

Var. *flabelliceps*, Carbonell.

Var. *flexuosum*, Woll.

Var. *foliosa-crispatum*, Carbonell.

Var. „ *-cristatum*, Woll.

Var. *Frizellæ*, Moore.

Var. „ *cristatum*, Jones.

Var. „ *multifidum*, Barnes.

Var. „ *nanum*, Ivery.

Var. *furcans*, Moore.

Var. *Girdlestoni*, Ivery.

Var. *glomeratum*, Moore.

Var. „ *grandiceps*, Jones.

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Asplenium, L.—cont.**A. Filix-fœmina, Bernh. Europe—cont.**

- Var. *gracile*, *Moore*.
- Var. *grammicon*, *Lowe*.
- Var. *grandiceps*, *Moore*.
- Var. „ *globosum*, *Sim*.
- Var. „ *minus*, *Carbonell*.
- Var. „ *pumilum*, *Sim*.
- Var. *Harrisæ*, *Lowe*.
- Var. *Howardæ*, *Moore*.
- Var. *imbricatum*, *Carbonell*.
- Var. *incisum*, *Newm*.
- Var. *inæquale*, *Woll*.
- Var. „ *cristatum*, *Jones*.
- Var. *interruptum*, *Moore*.
- Var. *irregulare*, *Moore*.
- Var. *kalothrix*, *Lowe*.
- Var. *kilmorensis*, *Carbonell*.
- Var. *laceratum*, *Moore*.
- Var. *laciniatum*, *Moore*.
- Var. „ *angustatum*, *Jones*.
- Var. „ *congestum*, *Stansf*.
- Var. „ *Craigii*, *Jones*.
- Var. „ *cristatum*, *Lowe*.
- Var. „ *elegans*, *Stansf*.
- Var. „ *flabelliforme*, *Jones*.
- Var. „ *furcans*, *Jones*.
- Var. „ *ramulosum*, *Stansf*.
- Var. *Lowæ*, *Lowe*.
- Var. „ *capitatum*, *Lowe*.
- Var. *minimum*, *Birkenhead*.
- Var. *Moorei*, *Jones*.

Asplenium, L.—cont.**A. Filix-fœmina, Bernh. Europe—cont.**Var. *multiceps*, *Moore*.Var. *multifidum*, *Moore*.Var. „ *cristatum*, *Jones*.Var. „ *laxum*, *Jones*.Var. „ *tenue*, *Jones*.Var. *nodosum*, *Jones*.Var. „ *multifidum*, *Jones*.Var. „ *nanum*, *Jones*.Var. „ *ramulosum*, *Jones*.Var. „ *truncatum*, *Jones*.Var. *orbiculatum*, *Lowe*.Var. *pannosum*, *Moore*.Var. „ *cristatum*, *Jones*.Var. *Parsonsi*, *Moore*.Var. *paucidentatum*, *Mapp*.Var. „ *cristatum*, *Mapp*.Var. *pectinatum*, *Moore*.Var. „ *Stableri*, *Mapp*.Var. *percristatum*, *Lowe*.Var. *perfectum*, *Carbonell*.Var. *phylomanes*, *Mapp*.Var. *plumosum*, *Moore*.Var. „ *divaricatum*, *Moore*.Var. „ *Edwardsi*, *Sim*.Var. „ *elegans*, *Parsons*.Var. „ *Jacksoni*, *Carbonell*.Var. „ *kalothrix*, *Lowe*.Var. „ *multifidum*, *Stansf*.Var. *polydactylum*, *Moore*.Var. „ *grandiceps*, *Jones*.Var. *Pritchardii*, *Stansf*.

Asplenium, L.—cont.**A. Filix-fœmina, Bernh. Europe—cont.**

Var. „ **cristatum, Stansf.**

Var. **proteoides, Lowe.**

Var. **proteum, Clap.**

Var. „ **cristatum, Jones.**

Var. **pulcherrimum, Jones.**

Var. „ **cristatum, Jones.**

Var. **Pulleri, Moore.**

Var. **ramosum ramo-cristatum, Jones.**

Var. **rectangulare, Moore.**

Var. **refractum, Moore.**

Var. **reflexum, Woll.**

Var. **reflexum cristatum, Jones.**

Var. **regale, Moore.**

Var. **rhæticum, Moore.**

Var. „ **reflexum, Mapp.**

Var. **rotundatum, Woll.**

Var. „ **lunulatum, Carbonell.**

Var. **Ryleyæ, Carbonell.**

Var. **sagittatum, Moore.**

Var. „ **lunulatum, Carbonell.**

Var. **setigerum, Jones.**

Var. **Stableri, Lowe.**

Var. **Stansfieldii, Lowe.**

Var. **stipatum, Moore.**

Var. „ **capitatum, Carbonell.**

Var. **subplumosum, Padley.**

Var. „ **cristatum, Carbonell.**

Var. **todeoides, Stansf.**

Var. **tortile, Moore.**

Var. **torto-cristatum, Carbonell.**

Asplenium, L.—cont.**A. Filix-fœmina, Bernh. Europe—cont.**

- Var. „ -grandiceps, *Carbonell*.
- Var. truncato-pinnulum, *Jones*.
- Var. unco-cristatum, *Jones*.
- Var. „ -ramulosum, *Stansf.*
- Var. variegatum, *Wol.*
- Var. *Vernonæ*, *Jervis*.
- Var. „ corymbiferum, *Stansf.*
- Var. „ crispum, *Stansf.*
- Var. „ cristatum, *Mapp.*
- Var. *Victoriæ*, *Lowe*.
- Var. *Williamsii*, *Jones*.

A. Trichomanes, L. Temperate regions.

- Var. cristatum, *Moore*.
- Var. incisum, *Moore*.
- Var. trogyense, *Lowe*.

C. fragilis, Bernh. Europe.

- Var. angustata, *Smith*.
- Var. dickieana, *Moore*.

Lomaria, Willd.**L. Spicant, Desv. Europe.**

- Var. apiculata, *Moore*.
- Var. caudata, *Moore*.
- Var. concinna, *Moore*.
- Var. congesta, *Barnes*.
- Var. lineare, *Moore*.
- Var. multifurcata, *Moore*.
- Var. plumosa, *Barnes*.

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Lomaria, *Willd.*—*cont.*

L. Spicant, *Desv.* Europe—*cont.*

Var. *ramo-cristata*, *Woll.*

Var. *trinervia*, *Moore.*

Nephrodium, *Rich.* (*Lastrea*.)

N. æmulum, *Baker.* Europe.

Var. *cristatum*, *Jones.*

N. Filix-mas, *Desv.* Europe.

Var. *attenuatum*, *Padley.*

Var. *Barnesii*, *Moore.*

Var. *Bollandæ*, *Moore.*

Var. *capitatum*, *Carbonell.*

Var. *Clowesii*, *Moore.*

Var. *crispatissimum*, *Jones.*

Var. *crispulatum*, *Hort.*

Var. *crispum*, *Sim.*

Var. „ *gracile*, *Lyell.*

Var. *crista-galli*, *Carbonell.*

Var. *cristatum*, *Lowe.*

Var. „ *angustatum*, *Moore.*

Var. „ *caudatum*, *Ivery.*

Var. *cronkleyense*, *Lowe.*

Var. *depauperatum*, *Padley.*

Var. *digitatum*, *Lowe.*

Var. *Ellacombei*, *Lowe.*

Var. *elongatum*, *Moore.*

Var. *erosum*, *Clowes.*

Var. „ *crispatum*, *Carbonell.*

Var. *fluctuosum*, *Moore.*

Var. *furcans*, *Moore.*

Var. *grandiceps*, *Sim.*

Var. *Ingrami*, *Moore.*

Nephrodium, Rich. (Lastrea)—cont.

N. Filix-mas, Desv. Europe—cont.

- Var. interruptum, *Moore.*
- Var. intermedium, *Carbonell.*
- Var. Jervisii, *Moore.*
- Var. lineare, *Woll.*
- Var. Marsdeniæ, *Lowe.*
- Var. multiforme, *Barnes.*
- Var. paleaceum, *Don.* (pseudo-mas, *Woll.*)
- Var. „ Belperi, *Lowe.*
- Var. „ cristatum, *Moore.*
- Var. „ „ intermedium, *Sim.*
- Var. „ furcillatum, *Woll.*
- Var. „ Lyelli, *Lowe.*
- Var. „ ramo-furcillatum, *Woll.*
- Var. „ recurvum, *Moore.*
- Var. „ revolvens, *Woll.*
- Var. polydactylum, *Lowe.*
- Var. propinquum, *Woll.*
- Var. „ cristatum, *Moore.*
- Var. „ excurrens, *Moore.*
- Var. „ Gottii, *Lowe.*
- Var. „ gracile, *Moore.*
- Var. „ grandiceps, *Moore.*
- Var. „ laciniatum, *Lowe.*
- Var. „ parviceps, *Barnes.*
- Var. „ polydactylum, *Barnes.*
- Var. Pulleri, *Jones.*
- Var. ramo-cristatum, *Stansf.*
- Var. „ -furcillatum, *Carbonell.*
- Var. ramosum, *Barnes.*
- Var. ramulosissimum, *Woll.*

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Nephrodium, Rich. (Lastrea)—cont.**N. Filix-mas, Desv. Europe—cont.**Var. *revolvens*, *Humphreys*.Var. *subcristatum*, *Carbonell*.Var. *variegatum*, *Lowe*.**N. montanum, Baker. Europe.**Var. *cristatum*, *Woll*.**N. spinulosum, Desv. Europe.**Var. *dilatatum* (*Desv.*).Var. „ *angusti-pinnulum*, *Sim*.Var. „ *calomelanos*, *Jones*.Var. „ *crispato-cristatum*, *Jones*.Var. „ *crispum*, *Woll*.Var. „ *grandiceps*, *Barnes*.Var. „ *Howardæ*, *Jones*.Var. *lepidotum*, *Moore*.**Osmunda, L.****O. regalis, L. Europe, &c.**Var. *cristata*, *Moore*.Var. *palustris*, *Hort*.Var. *purpurascens*, *Moore*.**Polypodium, L.****P. alpestre, Hoppe. Europe.**Var. *flexile*, *Newm*. Scotland.**P. Phegopteris, L. Europe.**Var. *cristatum*, *Jones*.Var. *strictum*, *Barnes*.**P. vulgare, L. Europe.**Var. *acuto-serratum*, *Jones*.Var. *attenuatum*, *Moore*.Var. *bifidum*, *Francis*.

P. vulgare, L. Europe—*cont.*

- Var. *bifido-cristatum*, *Mapp.*
- Var. *cambricum* (*L.*).
- Var. „ *Barrowi*, *Barnes.*
- Var. *cornubiense*, *Moore.*
- Var. „ *elegantissimum*, *Stansf.*
- Var. „ *Fowleri*, *Lowe.*
- Var. *cornutum*, *Jones.*
- Var. *crenatum*, *Moore.*
- Var. *crispum*, *Jones.*
- Var. *cristatum*, *Moore.*
- Var. „ *Morleyi*, *Jones.*
- Var. *dentatum*, *Moore.*
- Var. *dentatum Barnesii*, *Moore.*
- Var. „ *Whitakeri*, *Moore*
- Var. *divisilobum*, *Hort.*
- Var. *Elworthii*, *Ivery.*
- Var. *falcatum*, *Jones.*
- Var. *folioso-abruptum*, *Barnes.*
- Var. *glomeratum*, *Moly.*
- Var. *irregulare*, *Moore.*
- Var. *marginatum*, *Moore.*
- Var. *marginato-attenuatum*, *Jones.*
- Var. *multifido-cristatum*, *Stansf.*
- Var. *omnilacerum*, *Moore.*
- Var. „ *truncatum*, *Wilson.*
- Var. *pulcherrimum*, *Moore.*
- Var. *ramosum*, *Moore.*
- Var. „ *Hillmani*, *Carbonell.*
- Var. *semilacerum* (*Link.*).
- Var. „ *obtusum*, *Dadds.*
- Var. „ *truncatum*, *Barnes.*
- Var. *serratum*, *Moore.*



Polypodium, L.—cont.**P. vulgare, L.** Europe—*cont.*Var. *suprasoriferum, Woll.*Var. *trichomanoides, Backh.*Var. *truncatum, Lowe.***Pteris, L.****P. aquilina, L.** Cosmopolitan.Var. *cristata, Moore.***Scolopendrium, Smith.****S. vulgare, L.** Europe.Var. *aduncum, Moore.*Var. *angustifrons, Ivery.*Var. *bimarginatum, Moore.*Var. *bimarginato-tenue, Jones.*Var. *bulbiferum, Lowe.*Var. *chelæfrons, Woll.*Var. *concevum, Lowe.*Var. *Coolingii, Lowe.*Var. *cornutum, Lowe.*Var. *corrugatum, Lowe.*Var. *crispum, Grey.*Var. „ *Cowburni, Lowe.*Var. „ *densum, Sim.*Var. „ *fimbriatum, Lowe.*Var. „ *grande, Lowe.*Var. „ *latum, Moore.*Var. „ *majus, Moore.*Var. „ *multifidum, Jones.*Var. „ *reflexum, Wills.*Var. „ *robustum, Jones.*

Scolopendrium, *Smith*—*cont.**S. vulgare*, *L.* Europe—*cont.*

Var. *crispum*, *serratum*, *Jones*.

Var. *crista-galli*, *Woll*.

Var. *cristatum*, *Moore*.

Var. „ *variegatum*, *Carbonell*.

Var. *cristatum cristato-digitatum*, *Sim*.

Var. *cuspidis*, *Carbonell*.

Var. *elegantissimum*, *Hort*.

Var. *fissidens*, *Woll*.

Var. *fisso-crenatum*, *Jones*.

Var. *fissum*, *Moore*.

Var. *Fowleri*, *Hort*.

Var. *grandiceps*, *Jones*.

Var. *Hankeyi*, *Lowe*.

Var. *illustre*, *Lowe*.

Var. *involvens*, *Mapp*.

Var. „ *minus*, *Hort*.

Var. *iveryanum*, *Ivery*.

Var. *Kelwayi*, *Lowe*.

Var. *laceratum*, *Moore*.

Var. *labyrinthum*, *Lowe*.

Var. *lonchophorum*, *Moore*.

Var. *macrosorum*, *Moore*.

Var. *Moonæ*, *Lowe*.

Var. *Malcolmsonæ*, *Stansf*.

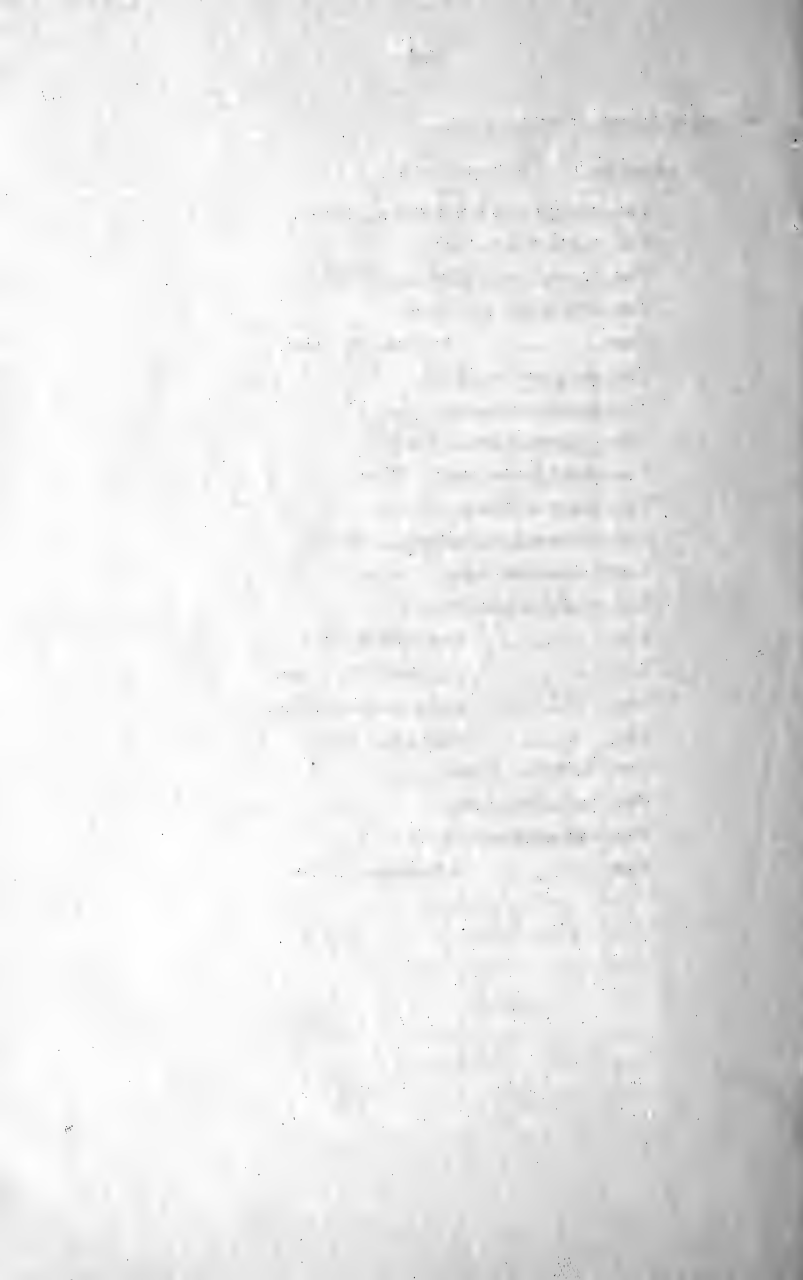
Var. *marginale*, *Hort*.

Var. *marginatum*, *Moore*.

Var. „ *fissum*, *Lowe*.

Var. *marginato-angustum*, *Clap*.

Var „ *-multifidum*, *Moore*.



Scolopendrium, *Smith*—*cont.**S. vulgare*, *L.* Europe—*cont.*

Var. *marginato-muricatum*, *Jones*.

Var. *muricatum*, *Lowe*.

Var. *muricato-cristatum*, *Woll*.

Var. *omnilacerum*, *Lowe*.

Var. „ *truncatum*, *Hort*.

Var. *periferens*, *Woll*.

Var. *pulcherrimum*, *Hort*.

Var. *ramoso-minus*, *Jackson*.

Var. *ramulosissimum*, *Woll*.

Var. *scalpturatum*, *Moore*.

Var. *submarginato-fissum*, *Wills*.

Var. *supralineatum*, *Moore*.

Var. *undulatum*, *Moore*.

Var. „ *capitatum*, *Hort*.

Var. „ *cochleatum*, *Jones*.

Var. „ *marginatum*, *Jones*.

Var. „ *reflexum*, *Hort*.

Var. *Veloisii*, *Moore*.

Var. *variable*, *Lowe*.

Var. *variegatum*, *Woll*.

Var. „ *aureolum*, *Lowe*.



GUIDES ON SALE AT THE ROYAL GARDENS, KEW.

Key Plan and Index to the Royal Botanic Garden and Arboretum, Kew. 3rd ed. 1893. *Price 2d.*

Official Guide to the Museums of Economic Botany. No. 1: Dicotyledons and Gymnosperms. 2nd ed., revised and augmented. 1886. *Price 4d.*

Official Guide to the Museums of Economic Botany. No. 2: Monocotyledons and Cryptogams. 1894. *Price 4d.*

Official Guide to the Museums of Economic Botany. No. 3: Timbers. 2nd ed., revised and augmented. 1893. *Price 3d.*

Official Guide to the North Gallery. 5th ed., revised and augmented. 1892. *Price 6d.*

Hand-list of Trees and Shrubs grown in Arboretum. Part I.: Polypetalæ. 1894. *Price 8d.*

Hand-list of Ferns and Fern-Allies cultivated in the Royal Gardens. 1895. *Price 6d.*
